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PROCEEDINGS  
OF THE  
AMERICAN ORIENTAL SOCIETY,  
AT ITS  
MEETING IN ANDOVER, MASSACHUSETTS,  
April 9th, 10th, and 11th, 1896.

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THE Society assembled at Andover, in Bartlet Chapel of Andover Theological Seminary, on Thursday of Easter Week, April 9th, at 3 P. M., and was called to order by its President, President Daniel Coit Gilman, of the Johns Hopkins University.

The following members were in attendance at one or more of the sessions :

Atkinson	Hicks	Moore, G. F.	Torrey
Brooks, Miss	Hopkins	Orne	Toy
Dickerman	Jackson	Robinson, G. L.	Ward, W. H.
Dike	Kellner	Ropes	Webb
Gilman	Lanman	Scott	Wilcox
Gottheil	Lyon	Skinner	Winslow
Haupt	Macdonald	Taylor	Wright, T. F.
Hazard	Merrill	Thayer	[Total, 31.]

Professor John Phelps Taylor, of Andover, for the Committee of Arrangements, presented a report in the form of a printed program. The opening of the sessions was thereby set for half past nine o'clock mornings and for three o'clock afternoons. Professor Taylor extended to the Society an invitation from Professor George Harris, for Thursday evening from eight to nine, to meet at his house the Faculty of the Theological Seminary and the Teachers in Phillips Academy; and also an invitation from Professor Moore for Thursday and Friday evenings. The report was adopted and the invitations accepted with the thanks of the Society. The business session was deferred to Friday morning; and the presentation of papers was begun. The President appointed as a Committee to nominate officers for the ensuing year Professors Moore, Haupt, and Gottheil. At five o'clock the session was adjourned.

The second session began at 9.30 Friday morning, President Gilman in the chair. The first hour or two were devoted to matters of business. The minutes of the last meeting, at New Haven, Conn., April 18th and 19th, 1895, were approved as printed.\* Reports of outgoing officers were then in order.

The Corresponding Secretary, Professor Lanman, of Harvard University, laid before the Society some of the correspondence of the year.

This included letters of regret from the Bishop of Cairo, from Professors I. H. Hall and Henry Preserved Smith, and from Mr. Witton.—From S. E. Peal, Rajmai P. O., Sibsagor, Assam, came a letter stating that he was at work upon the languages of the Naga Hills, and asking for a certain publication of our Society thereupon by Rev. Nathan Brown, a missionary of the American Baptist Union in Assam. It is pleasant to state that Mr. Van Name was able to send Mr. Peal more than he asked for, namely vol. iv. as well as vol. ii. of our Journal, since both contained pertinent material. "Its value to us here," says Mr. Peal, "is much greater than you might suppose. Dr. B. was a real *genius*."—The Venerable Subhūti, a Buddhist High Priest, of Waskaduwa, Ceylon, whose kind offices were mentioned in our last Proceedings (see Journal, vol. xvi., page cciv), in response to Professor Lanman's request for the transcript of a Singalese manuscript of a Pāli text, replies in a most obliging and efficient way.—Mr. Charles Johnston, of Ballykilbeg, County Down, of the Bengal Civil Service, retired, sends a dainty little volume of translations from the Upanishads (Dublin, Whaley); and with it, the welcome announcement that he has translated into English Deussen's "System des Vedānta." This translation is to run through the "Calcutta Review" and is then to appear in book-form.—Dr. Burgess of Edinburgh reports satisfactory progress upon his portfolios of collotype plates of ancient monuments in India to be issued by Griggs of London.—Professor Leumann of Strassburg writes about his Jaina studies, especially about his elaborate work on *Sīlānka* and the *Āvaśyaka* literature and the biography of *Haribhadra*.—Professor Bühler sends from Vienna a copy of vol. ii. of the "Sources of Indian Lexicography," published by the Austrian Academy, and dedicated to Weber and to the memory of Whitney; and writes of the progress of the "Grundriss der indischen Philologie," and expresses the hope that nearly a third part of the whole will be issued before the end of 1896.—A recent

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\* The omission of the reading and of the approval of the Recording Secretary's minutes is at variance with the usage of the Society and the advisability of the innovation is questionable. These minutes are intended to give a full and precise record of the actual doings of the sessions and to give them in their actual order. The printed "Proceedings," on the other hand, contain only such matters as it seems worth while to publish; but they do not constitute so full and sufficient a record as it may well prove desirable to have. May it not become a matter of regret if the control of the Recording Secretary's record is allowed to lapse?

letter, bearing the signature, still clear and firm, of our oldest Honorary Member, Böhrling (he was elected in 1844), pleasantly attests the unexhausted vitality of our Sanskrit Nestor.—Professor Weber sends some of the documents (among them, the address of the Berlin Academy and that of the Philosophical Faculty) relating to his recent fifty-year jubilee, which was saddened by the death, only a week before, of Mrs. Weber.—Professor Hermann Vierordt of Tübingen sends some interesting papers concerning the life and death of his father-in-law, Professor Roth.—Pandit Lāla Chandra Vidyā Bhāskara, of Jodhpur, Marwar, Rajputana, sends a copy\* of a Sanskrit poem narrating the life and achievements of the late Professor Whitney, and entitled *Vīliyam-Dvāit-Vīṭani-viduṣo jīvana-carita-kāvyaṃ*. It is a beautifully written manuscript of 33 pages in folio. The author says it is a version of the obituary notice of Mr. Whitney which appeared in the New York *Nation* of June 14, 1894. A reprint of this notice had been sent to him.

The Corresponding Secretary reported the names of recently deceased members. The record is as follows :

#### HONORARY MEMBERS.

Professor Rudolf von Roth, of Tübingen ;  
Dr. Reinhold Rost, of London.

#### CORPORATE MEMBERS.

Rev. Talbot W. Chambers, of New York City ;  
Hon. Charles Theodore Russell, of Cambridge, Mass. ;  
Dr. Henry Martyn Scudder, formerly of Niigata, Japan.

#### CORRESPONDING MEMBERS.†

Sir James Redhouse ;  
Rev. Dr. William Waterbury Scudder, formerly Missionary at Madanapalli, Madras ;  
Rev. Dr. Cornelius V. A. Van Dyck, of Beyrout, Syria.

The Treasurer, Mr. Henry C. Warren, of Cambridge, Mass., presented to the Society, by the hand of Professor Lanman, his accounts and statements for the year ending April, 1896. President Gilman had already appointed, before the meeting, Professors Toy and Lanman as an Auditing Committee to examine the Treasurer's funds and accounts. The Committee reported to the

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\* He has since then sent a copy for the Society's library and one for Mrs. Whitney.

† The names of the following, several years deceased, had for some reason not been reported to the Society :

Rev. Cephas Bennett, Missionary at Rangoon, Burma, died Nov. 16, 1885 ; Rev. Dr. Nathan Brown, Missionary at Yokohama, Japan, died Jan. 1, 1886 ; Dr. George Rosen, Detmold, Germany, died 1891 ; Rev. Dr. John H. Shedd, Missionary at Oroomiah, Persia.

Society during the meeting that on the 6th of April, 1896, they had examined the accounts and vouchers of the Treasurer and his evidences of actual possession of the Society's property and had found all to be in a satisfactory condition. Their report was duly accepted by the Society. The usual analytical summary of the General Account follows :

## RECEIPTS.

Balance from old account, April 18, 1895.....		\$1,578.39
Assessments (179) for 1895-96.....	\$895.00	
Assessments (30) for other years.....	150.00	
Sale of publications.....	173.62	
Income from funds (other than Bradley Fund).....	138.53	
Total income of the year.....		1,357.15
Total receipts for the year.....		\$2,935.54

## EXPENDITURES.

Journal, xvi. 2.....	\$818.64	
Job printing.....	80.50	
Books for Library.....	29.52	
Postage, etc.....	59.73	
Total disbursements for the year.....		988.39
Credit balance on Gen'l Account, April 6, 1896..		1,947.15
		<u>\$2,935.54</u>

The Treasurer adds several general statements : The account, so far as receipts are concerned, is an almost precise repetition of the one for 1894-95 ; and the similarity holds also in respect of the three several principal sources of revenue, to wit, assessments, sale of publications, and interest. As was the case in 1894-95, the Society's outlays for 1895-96 were well within its income.

The state of the funds is as follows :

## A. PRINCIPAL OF SPECIAL FUNDS.

Apr. 18, 1895 :		Apr. 6, 1896 :
\$1482.76	I. Bradley Type Fund (deposited in New Haven Savings Bank).....	\$1542.64
1000.00	II. Cotheal Publication Fund (deposited in the Provident Institution for Savings, Boston)..	1000.00
1000.00	III. Whitney Publication Fund (invested in eight shares of State National Bank stock).....	1000.00
75.00	IV. Life Membership Fund (deposited in the Suffolk Savings Bank, Boston) .....	75.00

## B. BALANCES BELONGING TO GENERAL ACCOUNT.

\$1498.38	I. Cash in Cambridge Savings Bank .....	\$1827.67
71.84	II. Cash in Provident Inst. for Savings, Boston..	109.65
8.17	III. Cash in Suffolk Savings Bank.....	9.83
<u>\$5136.15</u>		<u>\$5564.79</u>

The Librarian, Mr. Addison Van Name, of Yale University, presented his report for 1895-96. It is as follows :

The accessions of the past year have been 67 volumes, 64 parts of volumes, and 136 pamphlets. All received up to the middle of March are included in the list of "Additions" printed in the Society's Journal, vol. xvi., No. 2, just distributed. The most important single contribution is a series of twelve volumes of the publications of the *École des langues orientales vivantes*, Paris, sent in exchange for a set of our Journal. One noteworthy gift, received too late for entry there, deserves special mention—"The Life and Exploits of Alexander the Great," Ethiopic text and English translation, by Dr. E. A. Wallis Budge of the British Museum, London, 1896. These two sumptuous volumes, on large paper, "two hundred and fifty copies only printed for private circulation," are the gift of Lady Meux, of Theobald's Park, Hertfordshire, who bore the expense of publication and to whom the work is dedicated.

The current number of titles in the library is now 4881.

For the Committee of Publication, its Chairman, Professor Lanman, reported as follows: Number 2 of volume xvi. of the Journal had been issued March 31, 1896. It contains Articles V., VI., and VII. of the Journal proper, with the Arabic paging 261-317; and as an Appendix, in Roman paging from cxli-cclxxxiii, the Proceedings for Dec. 1894, and for April, 1895, the Additions to the Library, and the List of Members.\*—Concerning the size of the last few volumes, the following figures may be of interest :

Vol.	Issued.	Pages of Journal proper.	Pages of Proceedings, etc.	Sum.
xi.	1882-5	396	246	642
xii.	1881	383	---	383
xiii.	1889	376	323	699
xiv.	1890	424	209	633
xv.	1893	283	204	487
xvi.	1896	317	283	600

The sum total for the six volumes is 3444 pages; and the average is 574 pages per volume. For the fifteen years, the average is about 230 pages per year.

The Directors reported by their Scribe, Professor Lanman, as follows :

They had appointed the next meeting of the Society to be held at Baltimore, Md., Thursday, Friday, and Saturday of Easter Week, April 22d, 23d, and 24th, 1897: the Corresponding Secre-

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\* Number 1 of vol. xvi. of the Journal was issued (without Proceedings) in April, 1894. The Proceedings for April, 1893, were issued separately in June, 1893; and the Proceedings for March, 1894, were issued separately in September, 1894. Volume xvi. complete consists therefore of No. 1, of these two pamphlets and of No. 2.

tary, *ex officio*, and Professors Bloomfield and Haupt, to serve as a Committee of Arrangements. [Note that in 1898, Easter falls April 10th.]

The Corresponding Secretary, Professor Lanman, had already in his circular letter to the members issued just before the meeting said in his own name as follows :

It is quite true that the By-Laws of this Society do not in any way charge the Corresponding Secretary with the duty of editing its publications. On the other hand, it cannot be said that in recent years the Committee of Publication have charged themselves with that duty. As a matter of fact, since the beginning, the work has been, for the most part, in two or three pairs of hands. Perhaps the function of the Committee has latterly been held to be consultative and appellate ; although the acting-editor would certainly not refer a doubtful paper to the Committee in a case where the judgment of an expert more competent on that particular subject chanced to be available outside of the Committee. The Committee has now been increased to six, and is so large that, as a matter of course, there is no sense whatever of individual responsibility among its members.

We may well rejoice in the healthy growth of the Society during the last decade, and in its greatly increased activity and power of achievement. This growth and activity, however, has greatly increased the burdens of the office of Corresponding Secretary. It is manifest that a redistribution of the labor which, whether legally or prescriptively, attaches to that post, has become imperatively and immediately necessary. The most natural division is into the legitimate duties of the office on the one hand and its adscititious editorial functions on the other. I suggest that the Directors appoint one or two persons to edit the Journal, and hold him or them responsible for the proper conduct of that work. Such appointees need not be regarded as officers of the Society, and this change would accordingly involve no alteration of our laws ; and the Committee might continue as before.

Even with this change in the incidence of duties, the place of Corresponding Secretary will remain—just as it has been, and like that of the Editors—a laborious one, with much clerical work ; and upon the efficient administration of its duties will depend in no small measure the prosperity of the Society. Inasmuch as the transfer of the office with its duties and traditions from one man to another is at best a very wasteful proceeding, it is clear that no one ought to accept the place who is not willing to serve for, say, at least a decade. And finally, since the Society refused to consider this matter last year on the ground of the lack of time, it seems proper to ask now, before the meeting, for any suggestions upon this subject, and for expressions of willingness to undertake this serious responsibility and heavy labor from any member of the Society who will be kind enough to make them.

The Directors reported by their Chairman, President Gilman, as follows :

The Directors recommended that the Society rescind Supplementary By-Law Number II.

Whereupon, a vote being taken, the By-Law was rescinded by the Society.

In the last printed form, that By-Law read as follows : "The Committee of Publication shall consist of five members ; they shall be appointed by the Directors, and shall report to the Society at every regular meeting respecting the matters committed to their charge." And it was amended in April, 1895, so as to read as follows : "The Committee of Publication shall consist of six members, of whom the Corresponding Secretary shall be one. The Committee shall be appointed annually by the Board of Directors, and shall report to the Society at every regular meeting concerning the matters committed to its charge. The Corresponding Secretary shall be the Chairman of the Committee."

President Gilman announced that a Committee of the Directors had considered various questions relating to the Society's method of publication, and had made a written report to the Directors ; and that, by authority of the Directors, Professor Charles R. Lanman, of Harvard University, and Professor George F. Moore, of Andover Theological Seminary, had been appointed to serve as Responsible Editors of the Journal.

In the manuscript Records of the Directors, vol. i., pages 23 and 24 (compare Journal, vol. i., page xlviii), we read, under date of May 30, 1848, as follows :

"We have been led by some experience to believe that it would be well to distinguish three classes of members, namely, Corporate, Corresponding, and Honorary. The reasons in favor of creating a class of Corresponding Members are, that the Society will often find it for its advantage to seek communication with persons in Europe and in the East, not Americans, by attaching them to itself in this character, without going so far as to name them Honorary Members ; and that those Americans resident in the East, who are elected into the Society, sustain to it in fact the important relation of Corresponding Members, and might feel a stronger obligation to act for the Society, if placed formally in that position, while it is quite out of their power either to exercise the rights or to discharge the duties of Corporate Members."

The changes in the times—notably the vastly increased facilities for communication with the Orient through the Universal Postal Union and otherwise, and the presence in the East of many scholars besides those devoted to the work of Christian Missions—have brought it about as an incidental result that the category of Corresponding Members has lapsed into practical desuetude. It is desirable that this fact should be formally recognized by the Society.



It was accordingly recommended by the Directors that Article III. of the Constitution be changed so as to read as follows :

Article III. The members of this Society shall be distinguished as Corporate and Honorary.

Whereupon, a vote being taken, the amendment was adopted by the Society. [Note, however, that the class of Corresponding Members will continue to appear in our printed lists until extinguished by transfers or by deaths.]

By the vote of October, 1857 (Records of the Directors, vol. i., page 51 ; Journal, vol. vi., p. 579), it was provided

“ That the Directors may, at their discretion, and in view of the circumstances of each case, transfer to the list of Corresponding Members persons elected as Corporate Members, but who may have since permanently left this country, and to the list of Corporate Members persons chosen as Corresponding Members, but who may have since transferred their residence to this country.”

In view of the above facts and as a corollary to the above changes, it was provided

That members who have, by vote of the Directors, been transferred from the list of Corresponding Members to that of Corporate Members be restored to the list of Corresponding Members, unless they desire to remain Corporate Members, paying the annual assessment.

By-Law Number VII. in its last printed form read as follows :

VII. Corporate members shall be entitled to a copy of all the publications of the Society issued during their membership, and shall also have the privilege of taking a copy of those previously published, so far as the Society can supply them, at half the ordinary selling price. Corresponding and honorary members shall be entitled to the Society's publications only in return for services rendered,—for communications to the Society, or donations to its library or cabinet.

Upon recommendation of the Directors, the Society voted to amend it : first, by adding the words “ and Honorary ” after the word “ Corporate ” at the beginning ; and, secondly, by striking out the second sentence. [Note that the “ membership ” of a new member shall be construed to begin with the calendar year in which that new member was elected.]

Upon recommendation of the Directors, it was voted to add the following two paragraphs to By-Law Number III.:

III. b. After December 31, 1896, the fiscal year of the Society shall correspond with the calendar year.

III. c. At each annual business meeting in Easter week, the President shall appoint an auditing committee of two men—preferably men residing in or near the town where the Treasurer lives—to examine the Treasurer's accounts and vouchers, and to inspect the evidences of the

Society's property, and to see that the funds called for by his balances are in his hands. The Committee shall perform this duty as soon as possible after the New Year's day succeeding their appointment, and shall report their findings to the Society at the next annual business meeting thereafter. If these findings are satisfactory, the Treasurer shall receive his acquittance by a certificate to that effect, which shall be recorded in the Treasurer's book, and published in the Proceedings.

The President appointed Professors Toy and Lanman to serve as Auditing Committee for the fiscal year ending Dec. 31, 1896, with Professor Lyon as a substitute in case of the inability of one of the above-named gentlemen so to serve.

Reported—That the Directors had voted that, in case of the adoption of the proposed By-Laws III. *b* and III. *c*, the assessment for the fiscal year extending from April 7, 1896 to December 31, 1896 shall be three dollars.

Next in order of business was the report of the Committee on the Nomination of Officers, consisting of Professors Moore, Haupt, and Gottheil. The Corresponding Secretary, Professor Lanman, after nearly twenty years\* of such labor in the service of the American Philological Association and of the American Oriental Society, desired once more to be relieved of his secretarial duties; and accordingly Professor Hopkins, the successor of Professor Whitney at Yale University, was nominated in his stead. No other changes in the administrative offices were proposed. The nominees of the Committee were duly elected by the Society. The names of the Board of Officers for 1896-97 are as follows:

*President*—President Daniel Coit Gilman, of Baltimore.

*Vice-Presidents*—Dr. William Hayes Ward, of New York; Prof. C. H. Toy, of Cambridge; Prof. Isaac H. Hall, of New York.

*Corresponding Secretary*—Prof. Edward W. Hopkins, of New Haven.†

*Recording Secretary*—Prof. George F. Moore, of Andover.

*Treasurer*—Mr. Henry C. Warren, of Cambridge.

*Librarian*—Mr. Addison Van Name, of New Haven.

*Directors*—The officers above named; and Prof. Lanman, of Cambridge; Professors Gottheil and Jackson, of New York; Prof. Jastrow, of Philadelphia; Professors Bloomfield and Haupt, of Baltimore; Prof. Hyvernatt, of Washington.

With a view to avoiding much useless duplication of labor, Professor Lanman had urged the Board of Directors to recommend that the two different offices of Treasurer and of Corresponding Secretary be borne by the same person, as is virtually the case in the American Philological Association‡ and as was the

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\* More, namely, than the years of incumbency in the offices concerned.

† With Professor Hanns Oertel, of New Haven, to serve as his Deputy during the absence of Professor Hopkins in Europe and India.

‡ See Proceedings of the American Philological Association, p. xliii, in the Transactions for 1884.

case in the Oriental Society in the year 1891-92. It is highly important that both the Corresponding Secretary and the Treasurer should have—so far as is possible—some personal knowledge of the members. This is a difficult matter at best. The results of the inquiries of the one officer have to be communicated, with accurate dates and details, to the other, and *vice versa*. The plan of putting both offices into the hands of one man has resulted in a very clear saving of time and labor both in the case of the Philological Association and in that of the Oriental Society.

It did not appear feasible to carry out the above suggestion at present.

The Directors further reported by their scribe, Professor Lanman, that they had voted to recommend to the Society for election to membership the following persons:

AS CORPORATE MEMBERS:

Edward V. Arnold, Professor of Latin, University College of North Wales, (Bryn Seiriol) Bangor, Great Britain.

George M. Bolling, Instructor in Comparative Philology and Sanskrit, Catholic University of America, Washington, D. C.

Miss Sarah W. Brooks (Graduate of Radcliffe College), 28 Inman st., Cambridgeport, Mass.

Rev. Prof. Joseph Bruneau, S. T. L., St. Mary's Seminary, Baltimore, Md.

Rev. John Campbell, Church of the Incarnation, 4 West 104th street, New York, N. Y.

Miss Elizabeth S. Colton (Student of Semitic languages, and teacher at Miss Porter's School at Farmington), Easthampton, Mass.

Albert J. Edmunds, Historical Society of Pennsylvania, 1300 Locust st., Philadelphia, Pa.

Rev. Adolph Guttmacher, 1833 Linden ave., Baltimore, Md.

Ralph B. C. Hicks (Harvard University), 65 Hammond st., Cambridge, Mass.

Leonard Keene Hirshberg (Johns Hopkins University), 581 Gay st., Baltimore, Md.

Miss Eliza H. Kendrick, Ph.D. (Radcliffe College), Hunnewell ave., Newton, Mass.

Rev. Joseph Lanman, First Presbyterian Church, Princeton, Caldwell Co., Kentucky.

Rev. Clifton Hady Levy, 728 Lennox st., Baltimore, Md.

Henry F. Linscott, Instructor in Sanskrit and Philology, Brown University, Providence, R. I.

Rev. George Palmer Pardington, 194 Park Place, Brooklyn, N. Y.

Hugo Radau, Columbia University. New York, N. Y.

Prof. J. H. Stevenson, Vanderbilt University, Nashville, Tenn.

Dr. Earley Vernon Wilcox, 414 A Washington st., Somerville, Mass.

[Total, 18.]

Whereupon, ballot being had, the above-named ladies and gentlemen were duly elected Corporate Members of the Society.

Professor Gottheil, on behalf of the Committee appointed to make a Catalogue of Oriental Manuscripts existing in American Libraries, reported progress and added that new manuscripts were coming in. The Committee was continued and requested to report at the next meeting.

Professor Morris Jastrow having laid before the Society a scheme for an "Association for the Historical Study of Religions," to be organized, possibly, under the auspices of the American Oriental Society,—President Gilman reported that the Directors recommended the appointment of a Committee to consider what measures may be taken to promote the study of the History of Religions.

The recommendation was adopted; and the Chair appointed as this Committee the following gentlemen: Professor Gottheil, Chairman; and Professors Lanman, Toy, Jastrow, Hyvernatt, G. F. Moore, and Jackson; President W. R. Harper; Professor Haupt; Dr. Cyrus Adler; Dr. W. Hayes Ward; and Mr. Talcott Williams.

Incidentally, President Gilman suggested that in the conduct of our future meetings it would be desirable if one of the sessions were reserved for papers of a non-technical character and of general interest, in order that such friends of the Society as are not professional Orientalists may with pleasure and profit take part in its proceedings.

Professors Toy and Haupt were appointed a Committee to present to Professor Green upon his coming anniversary the felicitations of the Society, and therewith the following minute:

The American Oriental Society desires to extend to Professor William Henry Green, the Nestor of teachers of Hebrew in this country, its very hearty congratulations on the celebration of the fiftieth anniversary of his appointment as instructor in Hebrew in Princeton Theological Seminary, and to wish him yet many years of fruitful work.

At the meeting of the Society of Biblical Literature and Exegesis, held in New York City, Dec. 27, 1895, it was "*Voted* to inform the American Oriental Society that we are engaged in the effort to establish at some point in Bible Lands a School of Oriental Study and Research; and to invite the coöperation of the Oriental Society." This vote was duly communicated to the Oriental Society; and Professor Thayer, the President of the Biblical Society, presented the draft of an interesting plan.\* Thereupon, on motion of Professor Lyon, the following resolution was adopted:

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\* This may be found in the *Proceedings* of the Society of Biblical Literature and Exegesis, at the end of volume xv.

The American Oriental Society has received with great pleasure the communication of the Society of Biblical Literature and Exegesis regarding an "effort to establish at some point in Bible Lands a School of Oriental Study and Research."

The Oriental Society cannot express too warmly its approval of this enterprise, believing that the existence of such a School would give a new impulse to Biblical and Oriental scholarship.

With the promise of such coöperation as may become practicable, the Oriental Society wishes the Society of Biblical Literature and Exegesis all possible success in the development of their plan and the establishment of the proposed School.

The business thus dispatched, a brief recess was taken. At 11.30 the reading of papers was resumed at the point where it stopped on Thursday afternoon. The sessions of Friday afternoon and of Saturday morning were devoted almost exclusively to the presentation of papers. The social gatherings of Thursday evening at the houses of Professors Harris and Moore and of Friday evening at the house of Professor Moore were exceedingly pleasant and satisfactory. This was the first meeting of the Society at Andover. The place is in every way so convenient and suitable, and the expressions of pleasure and satisfaction on the part of the visiting members were so cordial, that it is to be hoped that the Society may meet again there at some not distant time.

After the Society had passed a vote of thanks to the Authorities of Andover Theological Seminary for the use of Bartlet Chapel, to Professors Harris and Moore for their kind and most acceptable hospitalities, and to the Committee of Arrangements (Professor Taylor, Chairman) for its efficient services, a final adjournment was had at 11.30 Saturday morning.

The following communications were announced in the Program of the meeting. Number 2, however, was not presented. Numbers 4, 11, 13, 26, 27, and 34 were presented by title. Parts of numbers 9 and 20 were presented informally at the social gathering at Professor Moore's.

1. Professor E. V. Arnold, University College of North Wales, Bangor; Grammatical development in the five epochs of the Rig-Veda and in the Atharva-Veda.

2. Rev. Dr. Blodget, of Peking; Ancestral worship in the Shu King.

3. Professor Bloomfield, Johns Hopkins University; The meaning of the compound *atharvāṅgirasas*, the ancient name of the fourth Veda.

4. Professor Bloomfield, Johns Hopkins University; On the "Frog-hymn," Rig-Veda, vii. 103.

5. Dr. Casanowicz, United States National Museum ; Alexander legends in Talmud and Midrash, with reference to Greek and Assyrian parallels.

6. Mr. Edmunds, Historical Society of Pennsylvania ; On the compilation of the Pāli Canon.

7. Professor Gottheil, Columbia University ; Further references to Zoroaster in Syriac literature.

8. Professor Haupt, Johns Hopkins University ; On *ussharnā*, Ezra v. 3, 9.

9. Professor Haupt, Johns Hopkins University ; Notes on Genesis ii. 6 and iv. 1.

10. Professor Haupt, Johns Hopkins University ; Strack's *Abriss des Biblischen Aramäisch*.

11. Professor Hopkins, Yale University ; Prāgāthikāni, I. The vocabulary.

12. Professor Hopkins, Yale University ; The root *skar*.

13. Professor Hopkins, Yale University ; Conversion-tables for the references to the Calcutta and Bombay editions of the Mahā-Bhārata.

14. Professor Jackson, Columbia University ; On Mahā-Bhārata iii. 142. 35-45, or an echo of an old Hindu-Persian legend.

15. Professor Jackson, Columbia University ; Some Persian names in the Book of Esther.

16. Professor Jackson, Columbia University ; The iterative optative in the Avesta.

17. Dr. Johnston, Johns Hopkins University ; Epistolary literature of the Assyro-Babylonians.

18. Professor Lanman, Harvard University ; Professor Whitney's translation of the Atharva-Veda.

19. Professor Lanman, Harvard University ; Pāli miscellanies.

20. Professor Lanman, Harvard University ; Sanskrit epigrams.

21. Professor Lyon, Harvard University ; The distinctive feature of Babylonian poetry.

22. Professor Lyon, Harvard University ; The argument from silence in discussions of Hebrew poetry and literature.

23. Professor Macdonald, Hartford Theological Seminary ; A table exhibiting in a new form the interchange of sibilants and dentals in Semitic.

24. Professor Macdonald, Hartford Theological Seminary ; The place of al-Ghazālī in the development of the theology of Islam.

25. Professor G. F. Moore, Andover Theological Seminary ; The text and interpretation of Daniel viii. 9-14.

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27. Rev. Dr. Peters, St. Michael's Church, N. Y. ; The original site of civilization in Babylonia and the date of the same.

28. Dr. Scott, Radnor, Pa. ; The Malayan words in English.

29. Dr. Scott, Radnor, Pa. ; "Universal" qualities in the Malayan language.

30. Mr. Skinner, Harvard University ; The plural termination *ū*, *ūni* in Assyrian verbs.

31. Dr. Torrey, Andover Theological Seminary ; Announcement of an edition of Ibn Abd el-Hakam's "Futūḥ Miṣr."

32. Dr. Torrey, Andover Theological Seminary ; The meaning of the term "Mpharrshē" as applied to books of the Syriac Bible.

33. Dr. Torrey, Andover Theological Seminary ; The origin of the Old Testament Apocryphon called "I. Esdras."

34. Professor Wright, New Church School, Cambridge ; Note on a Greek inscription at Kolonieh, Palestine.

1. The Beginning of the Judaic Account of Creation ; by Professor Paul Haupt, Johns Hopkins University, Baltimore, Md.

We read at the beginning of the second account of creation in the Book of Genesis (2, 4<sup>b</sup>) : When JHVH made heaven and earth, and formed man out of the dust of the ground, breathing into his nostrils the breath of life, so that man became a living being—at that time there were yet even no wild plants of the desert, much less plants cultivated for food,\* because JHVH had not caused it to rain† upon the earth, and there was no man to cultivate the ground, but אֲרָב used to go up from the earth, watering the whole surface of the ground.

The Hebrew word אֲרָב, which I have here left untranslated, is rendered by most scholars, *mist*, *vapor*.‡ We find the translation, "a mist

\* Cf. Hupfeld, *Die Quellen der Genesis* (Berlin, 1853), p. 116. See also Cheyne's note on Isaiah 4, 2, in the *Sacred Books of the Old Testament* (English translation).

† This would have produced at least the wild plants.

‡ Cf. Vogel in his edition (Halae, 1775) of Hugonis Grotii *Annotationes in V. T.* (אֲרָב *vapores* significat, qui de terra adscenderunt) ; Bohlen (1835) ; Böhmer (1862) ; Schrader (1863) ; Tuch (1871) ; Keil (1878) ; Delitzsch (1887) ; Fripp (1892) ; Ad-dis (1892) ; Dillmann (1892) ; Spurrell (1896). If אֲרָב meant *mist* or *vapor*, it would be better to take עֲרֵב as Hifil as in Jer. 10, 13 (= 51, 16 ; quoted in

used to go up,"\* without a query,† even in the new German Version, edited by Professor Kautzsch, of Halle. In the second edition of Kautzsch and Socin's critical translation of the Book of Genesis, however, which appeared one year after the publication of the Book of Genesis in Kautzsch's AT, the word אַר is left untranslated, and in a footnote the editors state that the traditional rendering *mist* or *vapor* is very doubtful. They call attention to Friedrich Delitzsch's remarks in his great *Assyr. Wörterbuch* (Leipzig, 1886), p. 125, where אַר in our passage, as well as in Job 36, 27, is combined with the Assyrian *edû* "flood."‡ The reference to the *Assyr. edû* is also given in the last edition of Dillmann's Commentary on Genesis, p. 52, and in Gesenius-Buhl's Hebrew Dictionary.§ The notes on אַר in Friedrich Delitzsch's Hebrew Dictionary (*Assyr. Wörterb.*, p. 126) are, unfortunately, still in store for us.

The rendering *flood* was suggested a hundred years ago by the Scottish Roman Catholic Biblical critic Dr. Alexander Geddes,|| who published a new version of the Bible "faithfully translated from Corrected Texts of the Originals, with Various Readings, Explanatory Notes, and Critical Remarks." The work appeared in 1792, and was followed in 1800 by "Critical Remarks on the Hebrew Scriptures." Geddes says, like Friedrich Delitzsch, that אַר means *flood*, and that even in Job 36, 27 it does not mean *mist* or *cloud*; perhaps we should read in the passage of Job, with Houbigant, נַאֲדִי. His remarks are also given, in German, in J. S. Vater's *Commentar zum Pentateuch*, vol. i, p. 18 (Halle, 1802).

ψ 35, 7) וַיַּעֲלֵה נְשִׂימִים מִקְצֵה הָאָרֶץ = *He causes the vapors to ascend from the ends of the earth, i. e. probably from the universal sea encircling the disc of the earth.* Cf. Am. Or. Soc. Proc., March, 1894, p. civ.

\* This is the translation given by Rabbi Saadya (892-942) in his Arabic Version of the Pentateuch. But Saadya inserts the negative: لَا بَخَارَ كَانَ يَصْعَدُ مِنْهَا فَيَسْقِي جَمِيعَ جَهَّهَا. Cf. Lagarde, *Materialien zum Pentateuch*, i, p. 3 (Leipzig, 1867). Grotius (who, however, translates *spring*) thinks that Saadya read the negative in the Hebrew MS. he used. But Houbigant (1777) is no doubt right in remarking that the negative was merely supplied by Saadya *suo Marte*. After all, the insertion of the negative is more sensible than the traditional rendering.

† Wellhausen has queried the rendering *Nebel* in all his editions of his *Prolegomena*; cf. fourth edition, p. 304; first edition (1878), p. 342.

‡ Delitzsch's father, in his commentary on Job (1876), compared אַר with the *Assyr. idû* "asphalt," which in the *Assyr. Wörterbuch* is derived from the same stem as *edû*.

§ See also Gunkel, *Schöpfung und Chaos* (Göttingen, 1895), p. 15.

|| Geddes was the priest of a Roman Catholic congregation near Aberdeen, and he received the honorary LL. D. degree from Aberdeen. He is said to have resembled Herder. Cf. Cheyne, *Founders of Old Test. Criticism* (London, 1893), pp. 4-12; Holzinger, *Einleitung in den Hexateuch* (Freiburg, 1893), p. 43.



If we adopt Geddes' suggestion, the translation of v. 6 would be : a flood used to come up from the earth, watering the whole surface of the ground. Kautzsch and Socin refer to Gen. 7, 11 in the priestly account of the Deluge, where we read that in the 600th year of Noah's life all the fountains of the great deep were broken up, and the windows of heaven opened. Assyr. *edû*, however, is never used of underground water. In all the passages I know of, it refers to the water of seas and rivers. I believe that we should read **וַאֲרַ יַעֲלֶה עַל-הָאָרֶץ** instead of **וַאֲרַ יַעֲלֶה מִן-הָאָרֶץ**. This would mean : The water used to come over the land, and flood the ground.

We must remember in this connection that the Biblical accounts of Creation, both the priestly and the prophetic,\* go back to Babylonia,† just as the story of Paradise points to Babylonia.‡ Babylonia is not like Palestine, as we read in Deut. 11, 11, a land of hills and valleys that drinks water from§ the rain of heaven, a land which JHVH cares for, whereon His eyes are from the beginning of the year to the end of the year ; Babylonia was, like Egypt, a land where it was necessary to water the seed that was sown, with the foot|| like a garden of vegetables. Without artificial irrigation Babylonia is a desert¶ ; the higher regions dry up, and the lower districts become swamps.¶| Many a part of Babylonia that was a land of gardens a thousand years ago, during the reign of the Abbasside Caliphs, is now covered with water. The overflowing of the Euphrates and Tigris is not, like the annual inundation of the Nile, a blessing, but it inflicts incalculable damage. In Babylonia not only the fertility of the soil, but the soil itself is, just as in Holland, the product of human labor.¶| Without drainage and irrigation, cultivation of the ground is impossible. The Babylonians forced the Tigris to flow along the eastern boundary of the alluvial plain, and the Euphrates was made to take its course to the sea through Lake Nájaf, instead of losing itself in the swamps of Southern Babylonia.¶|

From this point of view, the words, *And man was not there to cultivate the ground, but the water of the sea and the rivers used to come over the*

\* For the past fourteen years I have always stated in my classes that the Judaic accounts of Creation, the Deluge, etc., were of course pre-exilic, but that they had afterwards been retouched in some passages.

† Cf. Gunkel, *Schöpfung und Chaos*, p. 169.

‡ See my paper in *Ueber Land und Meer*, vol. 73, no. 15, p. 349.

§ Literally according to.

|| I. e. either by water-wheels turned by men pressing upon them with the foot in the same way that water is still often drawn from wells in Palestine ; or "the reference may be to the mode of distributing water from the canals over a field, by making or breaking down with the foot the small ridges which regulate its flow, or by using the foot for the purpose of opening and closing sluices." Cf. Driver's Commentary on Deuteronomy, p. 129 (Edinburgh, 1895).

¶| See Sprenger, *Babylonien* (Heidelberg, 1886), pp. 19, 27, 22, 23, 73.

land flooding the whole surface of the ground, appear in a new light. The Biblical idea of Chaos, the whole earth submerged, with no separation between land and water,\* is specifically Babylonian. Wellhausen supplies at the beginning of the second account of creation: *Es war alles trockene Wüste*, it was all an arid waste. He should have substituted *Wasserwüste*, a watery waste.†

The reading ואר יעלה על הארץ instead of ואר יעלה מן הארץ is found in a manuscript of the Targum on the Pentateuch (Cod. Mus. Brit. Or. 2228) of which Merx has published some extracts in his *Chrestomathia Targumica* (Berlin, 1888), p. 61: ועננא הוה סליק על ית כל אפי' ארעא ומשקי (אשקי). Most editions of the Targum have מן, including the Editio Ulyssiponensis, quoted by Merx in the footnotes, i. e. the Lisbon edition of 1491.‡ The Samaritan Targum also read: וענן יסק מן ארעה וישקי ית כל אפי' ארמתא (Heidenheim, *Der samar. Pentateuch*, Leipzig, 1884).

The substitution of מן for על was, of course, necessary if אר was interpreted to mean *mist* or *spring*. The meaning of the word must have been lost at a very early period. The Ancient Versions vary very much. The LXX, Aquila, and the Vulgate, as well as the Peshita, translate *spring* (πηγή, ἐπιβλυγμός, fons, مصدر).§ The Targum, on the other hand, renders *cloud*, עננא, both the Targum Onkelos and the Targum Jerushalmi. In the same way the LXX translates אר in Job 36, 27 νεφέλη. The rendering νεφέλη is also found in the translation of our passage, Gen. 2, 6, in the Græcus Venetus: νεφέλη δ' ἀναβαίνοι πρὸς τῆς γῆς καὶ ἄρδοι ξύμπαν τὸ πρόσωπον τῆς γῆς. And J. D. Michaelis, 1775, translated: *Es stiegen aber Wolken von der Erde auf und tränkten die ganze Oberfläche des Landes*.

אר is not found in any other passage of the O. T. except in Job 36, 27, at the beginning of the second half of the last discourse of Elihu:

\* L. 6 of the first fragment of the cuneiform Creation Tablets reads: *gipara lá qiqqura, ḡṣá lá še'a* "no ground had yet been diked (i. e. surrounded and protected with dikes or embankments to prevent inundations), no fields were to be seen." Cf. Delitzsch, *Das babyl. Welterschöpfungsepos* (Leipzig, 1896), p. 120. *Giparu* is a synonym of *úru* in l. 135 of the Deluge Tablet: *kima úri mitzurat usalku*, "fen land had become like the diked field," i. e. everything was covered with water.

† Cf. Berossus' σκότος καὶ ὕδωρ (Gunkel, *op. cit.*, p. 17). Several Jewish scholars propose to read in the first verse of the Bible: In the beginning God created the water and the earth, מים instead of שמים (Grätz, *Emendationes*, ad loc.).

‡ Cf. Merx, *Bemerkungen über die Vocalisation der Targume in the Transactions of the Berlin Congress of Orientalists*, vol. ii, p. 143 (Berlin, 1882).

§ Diestel conjectured עין. Cf. Lagarde, *Mater. z. Pent.*, p. 24, وكان يرتفع عين ماء وتسقى جميع وجه الارض.

יִרְעֵ נְטִי-מִים  
 יִזְקוּ מִטֶּר לְאָדָם  
 אֲשֶׁר-יִזְלוּ שְׁחָקִים  
 יִרְעֲפוּ עָלָי אֲדָם רַב :

The Authorized Version renders :

He maketh small the drops of water ;  
 They pour down rain according to the vapor thereof,  
 Which the clouds do drop,  
 And distil upon man abundantly.

The rendering *abundantly* would require the emendation לִרְב = לָרַב adopted by Siegfried in his edition of the Hebrew text. Delitzsch translates : *sie sickern als Regen bei seinem Nebeldunst* (they ooze as rain at His misty vapor); Hitzig : *sie seihen zu Regen seinen Dunst* (they filter His vapor into rain); Siegfried-Stade : *lösen den Regen in Nebel auf* (they dissolve the rain into vapor); Hoffmann : *er zieht Wassertropfen heran, die von seinem Nebel zu Regen geseiht werden, welche der Wolkenhimmel herabrinnen lässt, sodass sie auf viele Menschen triefen* (He attracts drops of water which are filtered into rain by His mist, which the welkin causes to flow down, so that they drip on many men). According to Hoffmann the mist or vapor is the strainer through which the drops of water are filtered, and become rain. He reads יִזְקוּ instead of יִזְקוּ. Dillmann translates : *in consequence of His mist (auf seinen Nebel hin, in Folge desselben).*

The suffix occasions some difficulty. I am inclined to think, with Geddes and Friedrich Delitzsch, that אָרַךְ in the line of Job means *flooding, watering, irrigation*, just as in our passage of Genesis, but the final ך is probably not the suffix, but a trace of the old vocalic case-ending, as we have it in the Assy. *edû* and in Hebrew forms like מַעֲיֵנו מִים, חֵיתוֹ אֶרֶץ ψ 114, 8 (König, *Lehrgebäude*, ii, 1, p. 482, β).\*

The combination of Hebrew אָרַךְ with Assyrian *edû* is all the more probable as the ideogram of *edû* shows that it means *water of irrigation*, the ideogram for *edû* is explained in the vocabulary ii R. 30, 15 by *šaḡû ša eqlî* (حقل) "irrigation of the field," and *edû* is also used in connection with the Shaf'el *šusḡû*, the Assy. equivalent of הַשְׁקָה, in the Cylinder Inscription of Sargon II, commented on by

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\* The final *ô* in the Babylonian loanword *bēlô*, "tribute" (Assyr. *bilat* = Ethiopic *bēnât*; cf. Proc. Am. Or. Soc., Oct. 1887, p. ccliv, below), in the Book of Ezra, seems to be different.

Professor Lyon, l. 37: *kī gībiš edī me nuxši\** šušqī (cf. Lyon's *Sargon*, p. 67; Schrader's KB. ii. 45, 37) "to irrigate the land with abundant water like the flood of the sea." The word אִיך† *calamity* may be a differentiation of אֵך *flood*. *Flood* or *high water* is a common metaphor in Hebrew for *affliction, calamity, distress*.‡ In Assyrian we have for אִיך *distress* the Pael form *uddû*, plur. *uddâti*.§ The comparison of אִיך *calamity* with Arabic آد يَرُود *to bend, to trouble*, is just as doubtful as the combination of אֵך *mist* (?) with Arabic إِيَاد.

2. The seat of the earliest civilization in Babylonia, and the date of its beginnings; by Dr. John P. Peters, New York, N. Y.

One of the conspicuous and unpleasant features of travel in Babylonia are the mortuary caravans which one meets conveying the dead from Persia to the sacred city of Nejef. All travelers in this region refer to their experience in encountering these caravans, and especially to the unpleasantness of spending the night at the khan with one of them. The Persians believe that the man who is buried in the sacred soil of Nejef will find a quick and more certain entrance into paradise. Not unfrequently, persons approaching death, if they are able, come down to Nejef to die. I recall an instance of my own experience. I was awakened very early in the morning in the khan at Nejef by the request that I would get up, as my next-door neighbor had died during the night and they wished to carry out the corpse. He had come down for the purpose of dying there. In other cases, a man having died at home, his pious friends bring the body to Nejef to be buried; a journey, it may be, of a month or more. When one considers the way in which the coffins are made and the heat of the climate, it may be imagined that it is exceedingly unpleasant to spend a night in a khan close to a family bent on such a pious errand. Families coming down to Nejef for such a purpose frequently bring with them handsome rugs, one of which will be used as a pall for the dead at the funeral, while afterwards all will be sold to pay the expenses of the journey. I have one such rug—and I prize it highly—which served, before I bought it, as a pall at the funeral of a man in Nejef. It is a dated Persian rug, about eighty-five years old.

Ordinarily several families bent upon such an errand unite together to form a caravan. One of the common routes of travel is through Baghdad, across Kerbela, which is itself a sacred burial city, although of

\* For *nuxšu*, see my remark in *Die akkadische Sprache* (Berlin, 1883), p. xlii.

† Cf. e. g. Prov. 1, 27: אִתְּכָם כְּסוּפָה יֵאָתֵר *your calamity comes like a whirlwind*.

‡ Is. 8, 7. 8; ψψ 18, 17; 124, 4. 5, etc.; cf. Dr. Stevens' Commentary on the Songs of Degrees (Johns Hopkins thesis) in *Hebraica*, xi, 77.

§ See Delitzsch's *Handwörterbuch*, p. 22\*.

a sanctity in that regard much inferior to Nejef, and so down to Nejef. Another route is from the south. I do not know at what point pilgrims by this route enter Babylonia. I have met them first on the Ateshan canal above Samawa. They ascend this canal, cross a portion of the Bahr-i-Nejef, and go up the continuation of the Hindieh Canal above the sea to a point opposite Nejef, called Seheir, about three hours by donkey caravan from Nejef. Pilgrims carrying their dead to Nejef frequently place a coin in the mouth of the deceased for payment of expenses. Robbers infest the road and plunder smaller caravans, even stealing the coin from the mouth of the corpse. Between Samawa and Nejef some of these robbers fell upon us, as we were making the journey after dark, mistaking us for pious pilgrims carrying their dead to the sacred city. We were better armed than the brigands, and the consequence of their attempt to plunder us was that we captured them.

But not only do relatives bring the bodies of their dead to be buried in holy ground; there are also contractors who make it their business to go about from place to place and collect bodies of persons whose relatives wish to have them interred in Nejef but are unable or unwilling to incur the expense of the journey to that city. Bodies are dug out of the ground and consigned to the care of these contractors, who engage to transport them to Nejef and secure them proper burial there. The coffins used for this purpose at the present time are ordinary plain boxes of rough board. The Arabs of Babylonia use, instead of coffins made of boards, reeds, in which they encase the body, binding the two ends of the roll together with palm cords. Formerly it was the practice to bury the dead in the city of Nejef itself; and travelers tell us that caravans camped outside of the walls of the city, haggling with the Imāms of Ali's shrine with regard to the price, while the air was polluted by the terrible stench arising from the decomposing bodies. Under Turkish rule a stop has finally been put to this practice, and interments within the walls of Nejef are now either no longer made, or only made on special occasions by the payment of a great price. The whole plain about the city is, however, one vast cemetery.

The reason why Shiite Moslems have chosen Nejef as a place of interment is because it is the burial place of their prophet, Ali. But Nejef and Kerbela are not the only sacred burial sites. Half way between Diwanieh and Hillah, on the west shore of the Euphrates, lies a little *weli*, known as Imām Jasim, surrounded by a few miserable mud hovels. The neighborhood of this *weli* is reputed sacred, and many acres of ground are covered with the graves of the Shiites. There are also other similar burial places in lower Babylonia. The interesting fact to notice is, that while the particular locality in which interments take place may be new, the general practice of burial in this region is of the greatest antiquity. From time immemorial it has been the custom to bring the dead from great distances to be buried in the sacred soil of Babylonia. Such is the practice to-day; and excavations in the burial fields of Erech, Zerghul, and other places, have shown that the same practice was in existence in the Persian period, in the Parthian

period, and in the Babylonian period. Age after age, the dead have been brought from distant countries to be buried here.

It is evident, when we compare the modern use with the ancient and observe the persistence of the custom, that for some reason, at a very early period, the soil of a certain part of Babylonia came to be regarded as sacred for purposes of interment. With the change of races and the change of religions in Babylonia, the original causes which led to the interment of the dead in that country passed away; nevertheless the custom still continued, being inherited as a fact by each new religion and each new race, and incorporated in its practice in precisely the same way in which old sacred sites and ceremonies are taken over from their predecessors by new nations and new religions, even where from the point of view of logical consistency such adoption would seem to be utterly out of the question. In the matter of sacred sites and ceremonies, every one who has read history is familiar with the phenomenon. The sacred sites of Aphrodite have been inherited by the Virgin Mary; and the liquefaction of blood, practiced as a heathen miracle in the time of Horace, is continued under the Christian religion with a different name. So also the custom of burying the dead in Babylonia, having been once established, was continued from age to age and from religion to religion under substantially the same forms. The question is, How did the practice of bringing the dead from distant countries to bury them in certain parts of Babylonia originate?

I do not think that we shall have to search long for the answer to this question. Everyone familiar with the records of the Hebrew religion will remember the indications of a similar practice among the Hebrews, in connection, primarily, with the cave of Machpelah at Hebron. We are told in the twenty-third chapter of Genesis that Abraham bought "the field of Ephron which was in Machpelah, which was before Mamre," and that he buried there Sarah his wife. Afterwards Isaac and Rebecca his wife were buried there. There Jacob buried Leah. Later Jacob himself died during the sojourn of the Israelites in Egypt; and it was considered necessary to bring his body back to his own land, and bury it with his ancestors in Machpelah. Not only that; we are told also that, although Joseph died in Egypt, it was considered necessary, when the Israelites came up to Canaan, to carry his body with them and bury it there. Now, while this may not represent history in a literal sense, certainly it is history in a broader sense. It gives us a picture of the Hebrews carrying their dead from distant places to be buried in the sacred soil of Canaan, and tells us that they did so because that was their ancestral home. Hebron became a burial place to them, not because it was originally sacred in itself, but because their forefathers had lived and were buried there. We have enough similar examples among uncivilized and half-civilized peoples to establish the general principle that there is a tendency to carry the dead for burial to the ancestral home.

Inversely, we may argue, where we find people carrying their dead a long distance for interment, that they do so because they count as

their ancestral home that place to which they are now carrying back their dead. Of course, the custom once established, a religious sanction of a new description may be given to it, so that the place becomes holy in and for itself, and peoples who have no ancestral connection with the place may ultimately come to bring their dead to be buried there by the side of the people to whose ancestors it belonged. In the custom existing at the present day of bringing bodies from distant parts of Babylonia, from Persia, and even from India to be buried in Nejef or some other similar sacred site in Babylonia, we have this secondary development, in which the practice of interment, having been once established, has received a religious sanction, and the place itself has come to be regarded as holy. The same was true, presumably, with reference to the practice of burial in Babylonia by the Persians and the Parthians; but there must have been behind all these a period when people brought their dead to be buried in Lower Babylonia because that was the place from which their ancestors had gone forth; and the origin of the practice of burying in Babylonia persons who have died in distant lands is to be sought in the fact that the region in which those burials have always taken place was the ancestral home of some people who originated that custom by bringing back their dead to Babylonia from the new homes to which they had migrated.

To just what portion of Babylonia do we find this practice of burial attaching itself? One of the most famous and largest of the necropoleis of Babylonia is that at Erech, which was partially explored by Loftus and is described by him in his "*Chaldæa and Susiana.*" The heading of the eighteenth chapter in that volume is in itself suggestive; "The absence of Tombs in the Mounds of Assyria.—Their abundance in Chaldæa.—Warka a vast Cemetery," etc. The opening part of the chapter is worth quoting in this connection: "It is a remarkable fact that, in spite of the long succession of years during which excavations have been carried on by the English and French governments in the mounds of Assyria, not a single instance has been recorded of undoubted Assyrian sepulture. . . . The natural inference therefore is, that the Assyrians either made away with their dead by some other method than by burial, or else that they conveyed them to some distant locality. If, however, Assyria be without its cemeteries, Chaldæa is full of them; every mound is an ancient burial-place between Niffar and Mugeyer! It would be too much, with our present knowledge, to say positively that Chaldæa was the necropolis of Assyria, but it is by no means improbable that such was the case. Arrian, the Greek historian, in describing Alexander's sail into the marshes south of Babylon, distinctly states that most of the sepulchres of the Assyrian kings were there constructed, and the same position is assigned them in the Peutingerian tables. The term Assyria, however, in the old geographers, is frequently applied to Babylonia, and the tombs alluded to may therefore be those only of the ancient kings of Babylonia. Still, it is likely that the Assyrians regarded with peculiar reverence that land out of which Asshur went forth and builded Nineveh, and that they interred their dead around the original seats of their forefathers.

Whether this were so or not, the whole region of Lower Chaldæa abounds in sepulchral cities of immense extent. By far the most important of these is Warka, where the enormous accumulation of human remains proves that it was a peculiarly sacred spot, and that it was so esteemed for many centuries. It is difficult to convey anything like a correct notion of the piles upon piles of human relics which there utterly astound the beholder. Excepting only the triangular space between the three principal ruins, the whole remainder of the platform, the whole space between the walls, and an unknown extent of desert beyond them, are everywhere filled with the bones and sepulchres of the dead. There is probably no other site in the world which can compare with Warka in this respect; even the tombs of ancient Thebes do not contain such an aggregate amount of mortality. From its foundation by Uruk until finally abandoned by the Parthians—a period of probably 2500 years—Warka appears to have been a sacred burial-place. In the same manner as the Persians at the present day convey their dead from the most remote corners of the Shah's dominions, and even from India itself, to the holy shrines of Kerbella and Meshed Ali, so, doubtless, it was the custom of the ancient people of Babylonia to transport the bones of their deceased relatives and friends to the necropolis of Warka and other sites in the dread solitude of the Chaldean marshes. The two great rivers, the Tigris and Euphrates, would, like the Nile in Egypt, afford an admirable means of conveying them from a distance, even from the upper plains of Assyria.

I was nowhere enabled to ascertain how deep in the mounds the funereal remains extend, although in several instances trenches were driven to the depth of thirty feet, beyond which the extreme looseness of the soil prevented my continuing the excavations with safety to the workmen; but I have every reason to believe that the same continuous mass of dead reaches to the very base of the highest portion of the platform—a depth of sixty feet. On this account there is considerable difficulty in obtaining information concerning the most ancient mode of disposing of the dead at Warka. It is only at the edges of the mounds where least built upon that the undoubted primitive tombs and their accompaniments occur."

Not far from Erech or Warka, perhaps a day's journey away, lies the mound of Umm-el-Aqarib. This was visited by de Sarzec, who found there one of the heads of statues now in the Louvre. He does not seem to have recognized the character of the place, which he calls by the name of Moulagareb. It was visited by Dr. Ward on the Wolfe expedition, and recognized by him as a necropolis. At the time of my visit, in 1890, I had the advantage of the report of the Germans of the work of their expedition at Zerghul and Hibba. I found at Umm-el-Aqarib a cemetery regularly laid out. There were recognizable streets, on which abutted the places of burial proper. I dug out some of these sufficiently to ascertain their general character as tombs, and also that one tier was built upon another, so that presumably the whole mound is one vast



accumulation of burials. In those portions of the mound which I excavated there were no burials of the later period, as at Erech, but every thing belonged to the old Babylonian period, presumably 2000 B. C. and earlier. There was one structure of considerable size, which may have been a temple, but I found no evidence of the existence of a city of the living in connection with this necropolis, although there was, a few miles away, a very large and important group of cities, represented by the ruin-mounds of Yokha, Ferwa, and Abu-Adham. It will be seen that this necropolis is in many respects similar to the one which the Germans excavated at Zerghul south of the Shatt-el-Haï.

Not far from Nippur, about a dozen miles south-south-east, lies the ruin-mound of Delehem. I was unable to conduct excavations at this point, but from my experience I think I may safely say, after an examination without excavation, that Delehem is a necropolis of a similar character, although smaller than Umm-el-Aqarib. In the immediate neighborhood of Nippur there are, further, a considerable number of small mounds, such as Derehem, about four or five miles away to the south-east, and Abu-Jowan, about the same distance to the north-east, as well as some still smaller unnamed mounds closer to the actual ruins of Nippur, which appear to have been burial mounds. I was able to examine these only slightly, but such examination as I made revealed nothing but graves; so that I concluded that in all probability these mounds represented places of burial at the time of the prosperity of Nippur. Delehem is too far from Nippur to have been the necropolis for that city only, and it is equally remote from the large ruins of Bismya. I have assumed that it was an independent necropolis like Zerghul and Umm-el-Aqarib. Taylor, in excavating at Mughair and Abu-Shahreïn (which, by the way, is no longer known, as far as I can ascertain, by that name, but is now called Nowawis), found frequent interments, although he seems to have found no separate necropolis.

Similarly, I found at Nippur interments in all parts of the ruins, among the houses and temples or under them, just as we find at the present day in some of the more remote Turkish and Arab towns. As Loftus has pointed out in the passage quoted above, these are the conditions prevailing everywhere, from Nippur southward, where excavations have been conducted. On the other hand, north of Nippur, in Babylonia as in Assyria, we find no necropoleis, and comparatively few interments in or about the cities and ruins which have been explored. In exploring Babylonia from Nippur southward the question which arises is, Whence have we so many burials? Whereas from Nippur northward the question which arises is, What did they do with their dead? From our present knowledge it would seem that it was the practice to bring the dead out of both northern Babylonia and Assyria, to be interred in the region of Lower Babylonia, from Nippur southward. The suggestion to be derived from this fact, if it be a fact, and I am inclined to think that it is, is that the region mentioned above was the original home of the ancestors of both the people of northern Babylonia and of Assyria, to which the inhabitants of those

countries looked back as a sacred spot because their ancestors had come from there. This view is further supported by the fact that there existed at the northern limit of that region, at Nippur, a temple looked upon as the most ancient and sacred in the Babylonian world, namely, E-Kur, the temple of En-Lil, or the great Bel. At a later date the land of burials was extended a little to the northward.

And now, assuming this original land of burials to be the home of Babylonian civilization, what was the date of the origin of that civilization? The southern limits of the region above mentioned differ greatly according to the date at which you consider it. The natural boundary on the south is the Persian Gulf. At the present time that is some 230 miles south-east of Nippur, in a direct line, and about 160 miles below Mughair, the ancient Ur. According to the calculations of Ainsworth (see Ainsworth's "*Researches in Assyria, Babylonia and Chaldæa*," London, 1838, pp. 181 ff.), there is added each year at the mouth of the Shatt-el-Arab ninety feet of land. That is, the land encroaches upon the sea that much each year. Using Arrian's narrative of the voyage of Nearchus, and Pliny's account of the country at the head of the Persian gulf, largely derived therefrom, Ainsworth endeavors to determine the position of the head of that gulf in the time of Alexander the Great. He observes that "Alexander called by his name the Arabian colony of Tospasinus, Spasinus Charax, or Charax, and that this was situated a little less than one mile from the sea." Pliny, *N. H.* vi. c. 27, describes the situation of Charax: "Charax . . . . habitatur in colle manu facto inter confluentes, dextra Tigrim, læva Eulæum." From the fact that it was at the confluence of the two rivers, this site can be readily determined. It is occupied by the modern town Mo'ammerah, which is situated at the junction of the Shatt-el-Arab and the Karoun. But Mo'ammerah was forty-seven miles away from the Persian gulf at the time of Ainsworth's measurements. Between the time of Nearchus, 325 B. C., and the time of Ainsworth, 1835 A. D., a period of 2160 years, forty-six miles of new land had therefore been formed at the head of the Persian gulf. According to my calculations this would make the average deposit from Alexander's time to our own about 114½ feet a year, but Ainsworth makes it 90.

Ainsworth further attempts to locate the Teredon or Tiridotus, said to have been founded by Nebuchadrezzar at the mouth of the Euphrates. For the location of this place, however, we have not the same data: and Ainsworth's location of it at Jebel Sinam, some ten miles below Zobeir, and therefore about that distance below the modern Bassorah, must be accepted with caution. If it were situated at the place named, it must have been about nine miles from the sea in Nebuchadrezzar's time, and not upon the sea, as Ainsworth seems to suppose; unless Ainsworth's calculations are quite untrustworthy and the rate of deposit between Mo'ammerah and Bassorah was more than twice as rapid as between Mo'ammerah and the sea. I fancy, however, that a site for Teredon even as far as nine miles from the coast in Nebuchadrezzar's time would in reality quite suit the requirements of the situation as actually described.

But this is a side question. The fact of a large alluvial deposit, measurable at least by average over a long period of years, at the head of the Persian gulf is obtained by the determination of the fact that the site of the modern Mo'ammerah was one mile from the sea in 325 B. C. Now from the gulf up to about the parallel of Baghdad the entire Babylonian plain is an alluvial deposit, mainly from the rivers Tigris and Euphrates; and from the general configuration of the region we may, I think, fairly argue that the rate of deposit is likely to have been always approximately the same. Having thus fixed the rate of deposit for the section from Mo'ammerah to the gulf, we may reckon back from this to obtain the date of formation of any given part of Babylonia. On the basis of Ainsworth's figure of 90 feet a year, we find that the sea would have reached up to the site of Ur about 7550 B. C. Taking my figures derived from Ainsworth's measurements, 114½ feet a year, we find that the seacoast would have been at that point about 5500 B. C. I believe that Ainsworth's figure is based not entirely upon calculation from the site of Mo'ammerah, but partly at least upon measurements of the present rate of increase. Possibly a middle rate would more nearly represent the actual average, giving us, say 6600 B. C. as the date required. I have no way of determining this matter, however; and while I believe that we can place reliance for the determination of the earliest possible date of Ur upon the measurement of the rate of alluvial deposit, I fancy that we must regard the date obtained by such measurements as only approximate and liable to vary a few hundred years from exactitude.

In old Babylonian tradition there is but one city further south than Ur and Eridu (Eridu stood on the solid plateau of the Arabian desert on the edge of the alluvial deposit, just within sight of Ur), and that is Surippak, the city of the ark. Whether this was a mythical place or not I do not know, but at least the site of Surippak has not yet been identified. Assyriologists regard Ur as having been originally a coast-city from the references in the inscriptions. This condition might, however, be fulfilled by a location a dozen miles or so from the actual coast on a navigable river or canal; but at least, if not on the sea, a city to be regarded as a coast-city must have been within a very few miles of the coast. As situated, not in the middle of the alluvial tract, but close to the western edge of the same, it is possible, and I suppose probable, that the land on which Ur stood was formed before that in the middle of the plain. The gulf might have extended further northward for some time after this strip of land along the shore had already become habitable.

Judging from the references in ancient Babylonian inscriptions, Ur must have been, as already stated, about the most southerly city of Babylonia in the earliest period. It was also at the southern limit of the burial-region, so far as we know. At the northern limit of that region apparently lies Nippur. Now, in the inscriptions, Sin of Ur is mentioned as the son of En-Lil or Bel of Nippur. This suggests an earlier date for Nippur, or at least for its temple and worship, than for Ur or its temple and worship, but establishes a close relationship

between the two. Our excavations at Nippur, if we accept the date of Sargon of Agane as fixed, as all Assyriologists assume that it is, at 3800 B. C., compel us to relegate the founding of that city to a period considerably antedating 6000 B. C., and perhaps antedating 7000 B. C.

My suggestion, from the various facts here marshalled, would be that the original home of civilization in Babylonia was the strip of land from Nippur southward to the neighborhood of Ur, and not, as has sometimes been argued, the region about Babylon and northward to Sippara. While the latter region is in itself older, it does not seem to have been older as the home of civilized man. The ancestors of the civilization of Babylonia seem to have come from the region between Nippur and what was then the coast of the Persian gulf. This would accord also with the tradition preserved to us in later sources that civilization came to Babylonia out of the Persian gulf. Possibly Eridu, on the Arabian plateau near the western shore and not far from the head of what was then the Persian gulf, may represent the oldest seat of that civilization. However that may be, at a very early period Nippur became the center of civilization and religion, being founded at a time when everything below Ur probably, and possibly some part of the region to the north of it, was still under water. As early as the close, if not the beginning, of the seventh millenium B. C., this strip of land at the head of the then Persian gulf seems to have been the home of civilized men, and from here civilization spread northward.

3. The termination *û*, *ûni* in Assyrian verbs; by Macy M. Skinner, Assistant in Semitic Languages in Harvard University, Cambridge, Mass.

The third masculine plural of the present, preterite, and permansive of Assyrian verbs, which usually ends in *û*, is frequently found with the longer form in *ûni*.\* An examination of prose texts extending over a period from Hammurabi to Cyrus, as well as of some poetic material, has yielded the following results.†

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\* The feminine in *ûni* is of very rare occurrence and we shall accordingly confine ourselves to the masculine.

† The texts consulted were: for Hammurabi, the Louvre inscript., in Ménant's *Inscript. de Hammourabi*, pp. 13-20; for Agu-kakrimi, VR33; for Ramman-nirari I., Harvard Semitic Museum tablet; for Nebuchadrezzar I., VR55-57; for Tiglath-pileser I., Prism inscript., IR9-16; for Nabu-apal-iddin, VR60-61; for Assurnazirpal, Annals, IR17-26; for Shalmaneser II, Bl. Ob., in Abel und Winckler's *Keilschrifttexte*, pp. 7-12, also Monolith, IIIR7-8; for Šamši-ramman, IR32-34; for Ramman-nirari III., IR35 Nos. 1 and 3; the Synchronous Hist., in Winckler's *Untersuchungen*, p. 148 and ff.; for Tiglath-pileser III., IIR67 and IIR9.2; for Sargon, Winckler's *Keilschrifttexte Sargons*, vol. 2, pp. 30-36; for Sennacherib, Prism inscript., IR37-42; for Esarhaddon, IR45-47 and IR50; for Assurbanipal, Rassam cyl., VR1-10; for Šamaššumukin, Cyl., Billing., and Letter

1. The longer form in *ûni* is employed almost exclusively in the first stem (I. 1 Pe'al). The total number of cases found of the form in *ûni* was 140. Of these, 113 were of stem I. 1: for example, *iš-šu-u-ni*, VR2,118; *iš-bat-u* (var. *ba-tu*)-*nim-ma*, VR1,129.

2. The verbs occurring with this longer form are mainly weak verbs. Of the 140 occurrences of the form in *ûni*, 109 were weak verbs: for example, *il-li-ku-û-nim-ma*, VR2,87; *id-ku-ni*, IR24,35; *iḱ-bu-ni-im-ma*, No. 7, Rev. 7, in *Thontafelfund von El Amarna*.

3. The form in *ûni* is seldom used with suffixes. Of the third masculine plural, 87 cases with suffix were found; 10 of these were in *ûni*, and 77 in *û*. Examples of the longer form with suffix are: *û-tir-ru-niṣ-šu*, VR5,34; *ub-lu-ni-šu*, IR18,76.

4. The use of the form in *ûni* does not appear to be influenced by syntactical considerations.

It is possible that the termination *ûni* had an old rhetorical function which has survived in certain verbs. We have seen that it occurs most frequently with stem I. 1 (Pe'al). As this is the light stem, and the other stems are increased in various other ways, may this not have been a method of strengthening the stem? Moreover the form in *ûni* has been retained mainly in weak verbs. This fact leads to the conjecture that one of the functions of the *ûni* termination was to preserve more nearly the normal number of syllables or to compensate for the loss of a weak letter. Naturally in the course of time the original force and significance of the ending was lost, and we find such forms as *ipparšidûni* as well as numerous other strong roots with the termination *ûni*.

A point of some interest in this connection is the relation of the Assyrian ending *ûni* to the plural termination *ûn* in Hebrew, Aramaic, etc. In the perfect, *ûn* occurs more or less frequently in Samaritan, Syriac, and later Targumic,\* but only three times in Hebrew.† In the imperfect, the Arabic (*ûna*) and Aramaic have retained it regularly; the

to Assurb., in Lehmann's *Šamaššumukin*, Taf. II., VIII, IX.: for Nebuchadrezzar, the East India House inscript., IR59-64, Grot. cyl., IR65-66, Build. inscript. of Nin-Karrak. in Abel und Winckler's *Keilschrifttexte*, p. 33 and ff., and Borsippa inscript., IR51 No. 1; for Nabonnidos, Ur inscript., IR69, also IR68 No. 1, VR63, and VR64; for Cyrus, Clay cyl., VR35.

Further: the Bab. Chron., in Abel und Winckler's *Keilschrifttexte*, pp. 47-48; the Bab. Creation Epic, in Delitzsch's *Das Babylonische Weltschöpfungsepos*; the Flood-legend, in Haupt's *Das Babylonische Nimrodepos*, pp. 134-143; of the El-Amarna tablets, those of Buraburiyash and Aššuruballit Nos. 2, 3, 4 in *The Tell El-Amarna Tablets of the British Museum*, and Nos. 4, 6, 7, 8, 9 of the Berlin collection, in Winckler's *Der Thontafelfund von El Amarna*.

\* See Böttcher's *Ausführliches Lehrbuch der Heb. Sprache*, §930.

† See Driver's *Tenses* (3d ed.), p. 6, Note 1. יָעִי, Dt. viii. 3, 16, and יָעִי Is. xxvi. 16. This last, Stade, *Gram.*, § 411a, rejects as suspicious. It is apparently a textual error. יָעִי Is. xxix. 21, is evidently an imperfect.

Hebrew, some 313 times.\* In Hebrew prose, the form in *ûn* is more common in the pre-exilic literature, the general principle being as follows: the older the book, the more frequent is its use; and the absence of the form is a mark of later date.† There does not seem to be any defined law of growth or degradation traceable in the history of the form in Assyrian. In the El-Amarna tablets examined, the forms in *ûni* were in predominance over those in *û*, and a further investigation of this material from so early a period (15th century B. C.) might yield some significant results. The use of the termination *ûni* in Assyrian and that of *ûn* in Hebrew have this in common, that they occur mainly with the *first* stem, and seldom with suffixes.

The following is a list of verbs which occur most frequently in the texts examined with the termination *ûni*, in the order of their frequency: *abâlu*, *tibû* (14 times in *ûni*); *alâku* (12 times); *arâdu*, *târu* (9); *našû*, *šabâtu* (7); *ašû*, *kibû*, *likû* (5); *paršadu* (4); *ilû*, *iribu*, *dakû*, *šakânu*, *šarâqu* (3).

4. On the 'Frog-hymn,' *Rig-Veda* vii. 103, together with some remarks on the composition of the Vedic hymns; by Professor M. Bloomfield, Johns Hopkins University, Baltimore, Md.

At the meeting of the A. O. S. in October, 1890, the writer presented a paper entitled, 'On a Vedic group of charms for extinguishing fire by means of water-plants and a frog,' an abstract of which appeared in the Proceedings of that meeting; the subject was afterwards treated more fully in the second series of 'Contributions to the interpretation of the Veda,' *Amer. Journ. Phil.* xi. 342 ff.‡ The primary object of the article was the interpretation of RV. x. 16. 13, 14, and sundry related stanzas, but incidentally there came to light a wide-spread custom of employing a frog and certain water-plants as symbols of water, as instruments for quenching fire, and as a means of producing water where formerly there was none. Ethnologically speaking, this is the simplest kind of folk-lore, and it would have required no special emphasis but for the fact that it helped us to discover in a considerable number of more or less vaguely understood Vedic passages the plainest kind of ordinary meaning.

An interesting modulation of this theme is the employment of the frog as a cure for fever. Stanza 2 of AV. vii. 116, a charm against *takman* or fever, reads: 'May (the *takman*) that returns on the morrow, he that returns on two (successive) days, the impious one, pass into this

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\* See C. H. Toy, *The Hebrew Verb-termination un*, in the *Trans. of the Am. Philol. Assoc.* for 1880, pp. 21-22.

† *Ibidem*, p. 34.

‡ The following additional passages, illustrating the matters there treated, may be noted: TS. v. 4. 2. 1; vii. 4. 18. 2; TB. iii. 9. 5. 4; MS. iii. 3. 3. 6; 12. 19; VS. xxiii. 10; ÇB. xiii. 8. 3. 13; ĀÇ. ii. 12. 2; x. 9. 2; LÇ. iii. 5. 13; Rîgvidhâna iv. 11. 1.

frog.' This prayer is supported symbolically at Kāuṣ. 32. 17 by fastening a frog beneath the bed of the patient and rinsing the patient off, so that the water shall wash the fever down upon the frog; cf. especially Keçava to the passage, and see the treatment of the hymn in our forthcoming translation of the AV. in the Sacred Books of the East.

Aside from these uses the frog occurs in the accessible Vedic literature, barring casual mention, only in the so-called frog-hymn, RV. vii. 103, and a few scattered but closely related stanzas in the Khila of the RV. itself, in AV. iv. 15. 13 ff., and in the Suparṇākhyāna ix. 3. A literal translation of RV. vii. 103 is as follows:

1. The frogs that have lain (quiet) during the year, (like) Brāhmaṇas devoted to a vow (of silence), have uttered their voice that has been quickened by Parjanya (the god of rain).

2. When the celestial waters came upon them,\* lying like a dry (water-) skin in the pool, then the voice of the frogs rises in concert, as the lowing of cows with calves.

3. When at the arrival of the rainy season it hath rained upon them plagued by thirst and longing, then uttering (the sound) *akkhala*,† as a son to his father one approaches the other croaking.

4. One of them takes hold of the other when they have rejoiced at the pouring forth of the waters, when the frogs sprinkled by the rain did skip, when they mingle their voices, the speckled and the green.

5. When they reply to one another's shouts as a pupil (repeats the words) of his teacher, then all that with them is like a paṭṭ lesson, when with loud croaking they shout upon the water.

6. One bleats like a cow, the other like a goat; one of them is speckled, the other is green; though of different shapes they own the same name, in many ways they modulate their voice when they speak.

7. Like Brāhmaṇas at the all-night soma-sacrifice (*atirātra*), chanting round about the full bowl (of soma), ye are about on that day of the year when the rainy season has set in.‡

\* The text reads *enam* 'him.' The slight change removes the anacoluthon.

† βρεκεκεκεξ κοῦξ κοῦξ. In Pañc. Br. xii. 4. 16 the croaking of the frogs is described by the verb *ākharoti* 'to utter the sound *āṭ*' (Scholiast, *maṇḍuko vṛṣṭyanantaram āṭāṭ ity evaṇ cābdaṇ karoti*). Cf. also the Sāmāns bearing the title *āṣkāranidhana* (-*nidhana*), Pañc. Br. viii. 1. 1; 2. 1; Ind. Stud. iii. 206; and see Weber, Festgruss an Rudolf von Roth, p. 136, note 4. [Cf. also the names of sounds (some onomatopoetic) of various creatures and things, ZDMG. xxxii. 734.—ED.]

‡ *samfāḥa* is to be taken as an adverbial instrumental from *samfāḥ* 'accomplishment, success.' The assumption for this one place of a stem *samfāḥa* (Pet. Lex., Grassmann, and Hillebrandt, Vedachrestomathie) is uncalled for. We have avoided the anacoluthon between *eṣām* and *vādathana* by rendering the latter as a third person.

§ There is no fun and no conviviality in all this. The Brāhmaṇas do not drink the soma at the *atirātra*; it is sacrificed at regular intervals, each libation being preceded by the chanting of holy hymns. Four libations are poured at three dif-

8. As Brāhmaṇas over the soma they have raised their voices, performing their annual song; as Adhvaryus (serving priests) that have sweated over the pots of hot milk (*gharma*)\* they are (all) in evidence, none of them are hidden.

9. The divine order of the twelve-month† they observed: these men do not disregard the season. Each year when the rainy season has arrived the heated pots (of heaven) are emptied out.‡

10. He that bleats like a cow, he that bleats like a goat; the speckled and the green one have bestowed upon us wealth; the frogs bestowing hundreds of cows shall extend (our) life at the thousand-fold pressing (of the soma).§

The hymn is 'late.'|| It is the only hymn outside of the first and tenth books of the RV. in which occurs the word *brāhmaṇā*; the combination *akṣhalī-kṛtya* represents the only instance in the RV. of the change of final *a* to *ī* in composition with the verb *kar* (and *bhū*); cf. Whitney, Sk. Gr.<sup>2</sup> 1091a, 1093a. Ritual words are common: *atirātrā*, *gharmā*, *adhvaryū* in addition to *brāhmaṇā*. The expression *vratacārīn* (st 1 = AV. iv. 15. 13), common in the later literature, occurs nowhere else in the Rik or Atharvan.

Stylistically and from a literary point of view the composition is mediocre. Not that it does not lose somewhat, by a prose rendering, in what we at least feel to be a certain naiveté, directness, and quick-

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ferent points of the night, and silence reigns between these points. As the chants of the Brāhmaṇas indicate that the bowl has been filled anew, thus the croaking of the frogs indicates that the pool has been filled by the rains of the monsoon. See Haug, *Brahma und die Brahmanen*, p. 41 (cf. *Aitareya-Brāhmaṇa*, Translation, pp. 263 ff.). The word *sāras* is a *vox media* 'pool,' and 'bowl.'

\* *Sāyana*, *gharmiṇo gharṁeṇa pravargēṇa carantaḥ* 'performing the pravargya-ceremony.' At the pravargya-ceremony the priests empty pots of milk which are heated before they are emptied. Similarly the frogs have sweated during the hot season. The word *gharmiṇo* thus harbors a double entente: 'heated by the pots of milk' (in relation to the priests), and 'affected by the hot season' (in relation to the frogs). Cf. Haug, l. c., p. 42; Hillebrandt's *Vedachrestomathie*, under *gharmā* and *gharmīn*; Oldenberg, *Die Religion des Veda*, p. 450, note.

† *Sāyana*, *dvādaçamāsātmakasya saṁvatsarasya*. Jacobi, *Festgruss an Rudolf von Roth*, 'of the twelfth month.'

‡ The simile between the heated pots of the priests and the hot season is continued: the heated pots are the heated heavens which pour forth their rain.

§ Doubtless again with double meaning: 'the generating of thousands of plants.' Thus *Sāyana*, *sahasra-saṁkhyākā oṣadhayaḥ sūyante*.

|| The *Pet. Lex.*, s. v. *atirātra*: 'Das lied ist zu den jüngsten zu zählen.' What is meant by late is, that a given hymn does not accord with the stereotyped, hieratic language of the family-books, the books of the soma-sacrifice, but approaches the less esoteric more popular diction of the AV., the Brāhmaṇas, and the classical language. The distinction exists, but it is one of dialect and style, rather than chronology. Many of the criteria employed for chronological purposes are obviously dialectic, e. g. 'late' *hvāyāmi* = Avest. *zbayemi*; *sārva* = Avest. *haurva*; *karómi*: *taruté*, etc. Of this another time.



ness of movement in the original. As to that, different readers will differ in accordance with their individuality and the scope of their observations of matters Hindu. The hymn is in our view thoroughly conventional: it is full of repetitions, and extreme in its employment of the catenary arrangement of its stanzas. The very opening in the livelier anuṣṭubh metre, continuing with the more stately triṣṭubh-jagatī, is one of the standard devices of the AV.\* Two clumsy anacoluthons in sts. 2 and 5 contribute to the characterization of the literary standard of the hymn, which is no higher than that of scores of Atharvan hymns. It has been suggested frequently and denied just as frequently that there is in the composition humor, nay that it is a satire on the Brāhmaṇas to compare their doings with those of frogs. As regards the latter point, we must regard it as extremely unlikely, in view of the attitude of the Vedas as a whole towards their priesthood. What is more to the point, however, is that the hymn obviously breathes the spirit of anxious conciliation: the frog, the symbol of eagerly craved water, is no joking matter, and the comparisons with the Brahmins and the sacred rites are begotten of the desire to praise, and not to disparage.

But aside from and above these considerations stands the broad question that must be asked for every Vedic hymn, namely, whether its composition was utilitarian or belletristic. Shall we conceive this poetry as the product of the mildly frenzied rhapsodist among the people, or, perhaps, as the child of the muse of some Rāja's poet laureate 'given to infinite tobacco,' as he walks along the jungle in the cool of the evening, at the opening of the rainy season, eager to bag some good subject for the delectation of the court of his patron? Or shall we let the Vedic writings continue their tale of a literature, practical, tendential, everywhere 'on the make?' The Vedic Hindus, to judge by their literature, were the most practical people of ancient times. This literature of a hundred works more or less, the Upanishads not excepted, has positively no aim in view except personal advantage, the favor of the gods, the granting of wishes, the destruction of enemies, and that continues clear down to the pessimistic Upanishads which pander to the desire for emancipation from the round of existences. The Rig-Veda is confessedly in part made of the same stuff. Anent other parts there are those whose literary feeling does not permit them to follow out the consequences of all that part of Vedic history which is clear. Here and there the sordid mass appears leavened by true beauty of conception, fineness of observation, good style, and all the other paraphernalia of literary composition which we of modern times are accustomed to see at work more or less divorced from any practical consideration. Why not? As if a hieratic literature excluded by its very terms the operations of literary taste and literary canons. The Vedic poets themselves boast that their poems are 'well-hewn,' and so they are in many cases. After

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\* Cf. AV. i. 29; iv. 16; vi. 49. The same effect is produced by introducing an anuṣṭubh-hymn with a gāyatrī, ii. 32; iv. 12, and probably also by placing a stanza in long metre at the head of one in short metre, e. g. ii. 4; vi. 111.

all the crust of priestly conventionalism has been pared off, there remains in the Vedic mantras enough beauty to make them attractive as a phase of the world's literature. But this incidental merit has nothing whatever to do with the prime object of their composition, the pursuit of some priestly object, not necessarily sordid, not necessarily devoid of true elevation of spirit. All preachers are not Peters of Amiens nor Savonarolas, but must be content to serve their religions, while maintaining that the laborer is worthy of his hire; and all scientists are not Galileos, but demand salaries as high as the market allows: and yet, after all, the spiritual guidance of civilized peoples and the great bulk of scientific advance are on the whole safe in the hands of people who are no less dependent upon baksheesh than the poet-priests of India.

The finikin literary *non possumus*, born of modern sensitiveness, of any one who feels that somehow he is individually incapable of imagining so good a literature—good in his eye, not necessarily in the eye of others—to be composed by priests for priestly purposes, may be respected as a personal frame of mind, but it is wholly otiose as an historical argument. The literary quality of the RV. might have been infinitely higher than it appears to its most enraged admirer, and yet be a purely hieratic performance, provided only that the priests themselves had risen to a correspondingly high plane of literary perception. To deny peremptorily that they could have so risen, though at the same time having an eye to the practical side of their calling, and the practical applicability of the products of their muse, is a dictatorial *machtspruch* which may inspire awe for a moment, but will not cause any one to flinch in his endeavors to fix more clearly the outline of Hindu antiquity in the light of those of its data which are already clear. This is the homespun method which has finally commended itself in all philologies, and Hindu philology, too, is, on the whole, in good hands. The burden is now on the other shoulder, and he that assumes for a given Vedic hymn a purely literary origin, he who denies that a given hymn was composed with reference to some definite occasion (*gelegenhetsdichtung*) and for some practical purpose, may no longer be allowed to fortify himself behind shifting æsthetic estimates. That is begging the question. It may be difficult, yea impossible—though that can be decided only in the future of Vedic philology—to point out the precise occasion in the case of one or another hymn. The great mass of the hymns are obviously practical, not only in their application but by the evidence of their innermost structure, and until it is proved that a given hymn is not so we shall be repaid by searching every time for the occasion and the purpose to which its origin is due.

This *oratio pro domo* on the part of the expounder of the frog-hymn will seem in the end unnecessarily fervent, and it would indeed be altogether superfluous if it were not still very necessary to draw the moral from what is simple and plain for the future usufruct of those Vedic hymns that are vague and nebulous, or do not at any rate betray on the face of them the exact motive of their composition. The frog-hymn is a

rain-charm, in style and purpose no better than many other productions of the medicine-man and the weather-maker. The chief interest of the hymn is to be found in the fact that it completes the chain of folk-lore beliefs and practices elaborated in the article quoted above. The frog in his character of water-animal par excellence quenches fire, produces water where previously there was none, is the proper repository for fever, and finally is associated with the annual appearance of rain in the rainy season. One will look in vain in the accessible Vedic literature for any mention of frogs—and they are mentioned quite frequently—which fails to suggest or state outright this practical view of the animal.\* The frogs, too, are everywhere taken seriously; their comparison with the Brāhmaṇas in vii. 103 is a bit of nice diplomacy, intended as a *captatio benevolentiae* of the frogs, not as a satire upon the priests engaged in the difficult performance of the all-night sacrifice (*atirātrā*), or the still more arduous manipulation of the heated pots (*gharmā*). That this is so, we may gather from Harivaṇṇa, Viṣṇuparvan 95. 23 = 8803, a passage which is clearly modelled after sts. 7 ff. of our hymn, and which by its very terms cannot be intended as a satire upon the Brahmins: 'The frog having lain asleep eight months croaks with his wives, as a Brahman devoted to the precious and true law recites hymns surrounded by his pupils.' Langlois in his translation remarks aptly, that according to our customs nothing would be quite as impertinent as the comparison of a respectable ecclesiastic with a frog, but the Hindus were not conscious of any taint of impiety in this *rap-prochement*. This attitude seems to us queer, but the Hindu is practical, and the frogs have water to give. The Hindu's worship of the to us intensely repulsive animal with forked tongue, 'the toothed rope' as he himself at times calls the serpent, is still more grotesque. And yet even the modern Hindu housewife does not attack an intruding serpent with the broom-handle, but places milk before him, her hands folded in the attitude of a suppliant.

The present hymn betrays its purpose most plainly in its last stanza, which contains, as in hosts of other charms, the true point, the *knall-effect*, of the hymn. The statement is made in the so-called prophetic aorist, the things desired are stated as having already taken place: † that the frogs are able to bestow wealth, cattle, and long life by no other inherent virtue than that of rain-making, needs hardly to be pointed out.

Aside from the evidence from within, the charm is immediately preceded in the RV. itself by two hymns that are rain-charms. They are addressed directly as prayers to Parjanya, the rain-god, and their char-

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\* Cf. especially the familiar passage, RV. ix. 112. 4, where the natural affinities of various kinds of men, animals, and things are described graphically; the poet winds up with the statement, *śēpo rōmaṇvantāu bhedaū, vār in maṇḍāka īchati*. See also Maitr. Up. i. 4; vi. 22.

† The commentators feel this: in all such cases they render the aorist by the imperative. Thus Sāyaṇa here, *adād*, i. e. *dadātu*. Cf. also Delbrück, Syntactische Forschungen ii. 87.

acter may be understood from stanza vii. 101. 5 as a specimen : ' May this prayer penetrate into the heart of the self-sovereign Parjanya, may he take delight in it : refreshing rains shall be ours and plants with goodly fruit protected by the gods.' The only difference between these hymns and the frog-hymn is that in the latter the frogs in their capacity as producers of water, are, as it were, the agents of the rain-god upon earth. and the prayer is shifted to them.

The khāilikāni sūktāni contain a later addendum to the hymn which shows how clearly it was understood at that time in the sense of a rain-charm : ' Join the chorus, O female frog ; announce the rain, O tadpole ; stretch out thy four feet, and paddle in the middle of the pool.' This stanza appears in AV. iv. 15. 14, a very lengthy and conglomerate rain-charm,\* preceded by the first stanza of the frog hymn, and followed by another stanza in which *khanvakhā* and *khāimakhā*, two fanciful frog-females,† are again implored to produce rain (*varṣām vanudhvam*). Again both the first stanza and the khila of our hymn occur in Yāska's Nirukta ix. 6, 7, and Yāska explains, ' Vasiṣṭha desiring rain praised Parjanya, the frogs acclaimed him. He perceiving the acclaiming frogs praised them with song. That is what this stanza means.‡ Clearest of all is a passage in the Suparṇākhyāna ix. 3, not concerned directly with the frogs at all, and certainly serious. It describes the conjuring of a great storm in vivid language : ' Shout, thunder, reach the clouds ; these waters of thine shall be level with the mountain-tops. . . Undefined, wholly water, the shore shall be ; the frog-female shall croak all the night. (The winds) shall milk the cloud (cow) whose trail drips with milk, the wild beast shall come seeking firm land.' The Suparṇākhyāna is a very interesting composition, a kind of an addendum (khila) to the RV., at any rate, so strongly reminiscent of the RV. as to leave one in doubt not infrequently whether a certain passage of it is to be regarded as a Vedic mantra or not. The fact that it weaves two of the main ideas of the frog-hymn, the croaking frog, and the all-night performances, into a highly poetic account of a storm, shows at any rate what its composer conceived that composition to be. Finally the hymn was still in use in India in 1871, when the late Professor Haug reported that ' in times of great drought, when the eagerly expected rain will not come, twenty or thirty Brāhmaṇas go to a river, and recite this and the preceding hymn.§ This is again the ancient reliance upon the frog, the Vedic quencher of fire, heat, and fever, a very trident in the hands of the ancient sorcerers.

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\* Cf. Kāuṣ. 103. 3, *saṃ ut patantu* (AV. iv. 15) *pra nabhasva* (vii. 18) *iti varṣīr juhoti*.

† Obviously personifications of another of the many onomatopoeic attempts to render the croak of the frog. It is worth noticing that throughout the varied frog-charms with which we have dealt, the female (*maṇḍūkī*, *maṇḍūkikā*) rather than the masculine (*maṇḍūka*) is often chosen as the emblem of moisture. This is sound physiology as well as folk-lore.

‡ Cf. Śaṅguruṣiṣya, p. 135 ; Sāyaṇa in the introduction to RV. vii. 103.

§ Brahma und die Brahmanen, p. 12 (cf. also the note, p. 40).

5. The meaning of the compound *atharvāṅgirasah*, the ancient name of the fourth Veda ; by Professor Bloomfield.

In general the fourth Veda is designated in ancient times by the compound *atharvāṅgirasah*. Quite frequently, however, the two members of the compound are separated, so that each is mentioned by itself, but always in more or less close conjunction with the other. This shows that the compound is not a congealed formula, but that the texts are conscious of the fact that each has a distinct individuality, and a right to separate existence. In other words, the AV. consists of *atharvan* and *aṅgiras* matter, and the question arises what elements in the make-up of this Veda these terms refer to. The answer may be given with a considerable degree of certainty : the term *atharvan* refers to the auspicious practices of the Veda, the *bheṣajāni* (AV. xi. 6. 14), those parts of the Veda which are recognized by the Atharvan ritual and the orthodox Brahmanical writings as *ṣānta* 'holy,' and *pāuṣṭika* 'confering prosperity'; the term *aṅgiras* refers to the hostile sorcery practices of the Veda, the *yātu* (Çat. Br. x. 5. 2. 20), or *abhicāra* which is terrible (*ghora*).

In J.A.O.S. xi. 387 the writer pointed to the existence of this distinction at Vāit. Sū. 5. 10 (cf. also Gop. Br. i. 2. 18), where two lists of plants are differentiated, one as *ātharvaṇyaḥ*, the other as *āṅgirasyaḥ*. The former refers to a list of plants catalogued at Kāuṣ. 8. 16 and described as *ṣāntāḥ* 'holy'; the second list is stated at Vāit. Sū. 5. 10 itself, and described as *āṅgirasā* : the name of the last of the list, *nir-dahantī* 'burning forth,' proves that they were employed in unholy sorcery practices (*ābhicārika*).\* The adjective *āṅgirasā* is in general in the ritualistic texts of the AV. a synonym of *ābhicārika* (Kāuṣ. 14. 30; 47. 2, 12; Ath. Pariç. 3. 1); hence the fifth *kalpa* of the AV., usually known as *āṅgirasakalpa*, bears also the names *abhicāra-kalpa*, and *vidhāna-kalpa*; see *ibid.* 376 ff.

Of non-Atharvanic texts, the Rig-vidhāna iv. 6. 4 has the following *çloka* : 'He against whom those that are skilled in the *Āṅgirasakalpas* practice sorcery repels them all with the *Pratyāṅgirasakalpa*.† The term *pratyāṅgirasā* is the exact equivalent of *pratyābhicāraṇa* 'counter-witchcraft' (AV. ii. 11. 2), and the *krtyāpratiharāṇāni*, Ath. Pariç. 32. 2 (cf. Kāuṣ. 39. 7, note). The texts of the sort called *ātharvaṇapratyāṅgirākālpam* (! see Ind. Stud. i. 469), *pratyāṅgirātātva*, *pratyāṅgirāpañcāṅga*, and *pratyāṅgirasūkta* (Böhtlingk's Lexicon), probably deal with the same theme; at any rate we may regard it as certain that the words *aṅgiras* and *āṅgirasā* are reflected by the ceremonial literature in the sense of *abhicāra* and *ābhicārika*.

Far more important is the evidence of certain texts of greater antiquity and higher dignity, which have occasion to mention the Atharvan incidentally, and enunciate clearly this two-fold character of the Veda.

\* Cf. AV. iii. 2. 5; vii. 108. 2; ix. 2. 4; 5. 31; xiv. 2. 48.

† Cf. also the following *çlokas*, and iv. 8. 3; see Rudolf Meyer's preface to his edition of the Rig-vidhāna, p. xxxi.

They make the very same distinction between *atharvan* and *aṅgiras* that appeared above, Vait. Sū. 5. 10. At Çāṅkh. Çr., the fourth Veda figures in its double character as *atharvan* and *aṅgiras*; here we find *bheṣajam*, i. e. 'remedial charms,' recited from the *atharvan*; and *ghoram*, i. e. *ābhicārikam* 'sorcery,' from the *aṅgiras*. Similarly in Āçv. Çr. the *ātharvaṇo vedaḥ* and *āṅgirasō vedaḥ* are treated individually, and again the former is correlated with *bheṣajam*, the latter with *ghoram*; cf. also Çat. Br. xiii. 4. 3. 3 ff. Indirect, yet significant testimony that this double character of the AV. was clearly established in Brahmanical times may be deduced from the formation of the names of two apocryphal teachers. One is Bhiṣaj Ātharvaṇa, Kāth. S. xvi. 3 (Ind. Stud. iii. 459); the other is Ghora Āṅgirasā, Kāuṣ. Br. xxx. 6, etc. The formation Bhiṣaj Ātharvaṇa is illustrated further by Çaṁyu Ātharvaṇa, Gop. Br. i. 2. 18; by Pañc. Br. xii. 9. 10, *bheṣajam vā ātharvaṇāni*, and xvi. 10. 10, *bheṣajam vāi devānām atharvāṇo bheṣajyāyāi* 'vā 'riṣṭyāi'; and by the expression *atharvabhiḥ cāntaḥ*, Kāuṣ. 125. 2.\* These names never, as far as is known, occur in inverted order: there is no Ghora Ātharvaṇa, and no Bhiṣaj Āṅgirasā; they reflect perfectly the individual character and the individual function of the two members of the compound *atharvāṅgirasah*.

It seems now, further, that the texts of the Atharva-saṁhitā mark this same distinction with no uncertain touch. At AV. xi. 6. 14 four Vedic mantra-classes are indicated by the expressions *īcaḥ*, *sāmāni*, *bheṣajā(nī)* and *yājñāni*. The choice of the word *bheṣajā* is certainly one-sided and eclectic. The passage appeals to the auspicious aspect of the holy texts, and naturally chooses the auspicious side of the Atharvan also. Its precise complement is Çat. Br. x. 5. 2. 20 where *yātu* 'sorcery' and the *yātuvidaḥ* 'those skilled in sorcery' are the representatives of the fourth Veda. The *bheṣajā* of the Atharvan passage and the *yātu* of the present passage make up together what is embraced in the name *atharvāṅgirasah* (AV. x. 7. 20). Moreover the Saṁhitā exhibits a decided predilection, bordering on rigorous distinction, for associating the term *āṅgirasā* with aggressive witchcraft, or the practice of spells (*kṛtyā*). Thus viii. 5. 9 (*kṛtyā āṅgirasāḥ*): x. 1. 6; xii. 5. 52; cf. also vi. 45. 3=RV. x. 164. 4. In xi. 4. 16 (cf. also viii. 7. 17) the distinction between Atharvanic and Āṅgirasic plants appears again, not, however, in a connection which conveys of necessity the contrast between 'holy' and 'witchcraft' plants. But it may do so, precisely as is the case in Vait. Sū. 5. 10. Cf. also AV. xix. 22. 1, 18; 23. 1; Gop. Br. i. 1. 5, 8; 3. 4; Pāṇini v. 2. 37.

As regards the chronology and cause of this differentiation of *atharvan* and *aṅgiras* the texts are apparently wholly silent. The association of both names (and in the ritual texts of the AV. of the name *bhṛgu* also) with the texts and practices of the fourth Veda may be sought in the character of these mythic beings. They are fire-priests, fire-churners, and the Atharvanic rites as well as the house-ceremonies

\* Cf. also Çānti, the wife of Atharvan, Bhāg. Pur. iii. 24. 24, and Wilson's translation of the Vis. Pur., vol. i. pp. 110, 200.

in general center about the fire, the oblations are into the fire. Fire-priests, in distinction from soma-priests, may have had in their keeping these homelier practices of common life. But whence the terrible aspect of the *Āṅgiras* in contrast with the auspicious *Atharvans*? In RV. x. 108. 10 *Saramā* threatens the *Paṇis* with the terrible *Āṅgiras* (*dāṅgirasāḥ ca ghorāḥ*). This statement, wholly incidental as it seems to be, is, of course, not to be entirely discarded. More important is the fact that *Bṛhaspati*, the divine *Purohita*, is distinctly *āṅgirasa*. In *Kāuṣ.* 135. 9 *Bṛhaspati* *Āṅgirasa* appears distinctly as the representative or the divinity of witchcraft performances. In the *Mahābhārata* he is frequently called *āṅgirasām creṣṭhaḥ*. In his function of body-priest of the gods it behooves him to exercise those fiercer qualities which are later in a broader sense regarded as *Āṅgirasic*. Thus RV. x. 164. 4=AV. vi. 45. 3 certainly exhibits this function of the divine *purohita*. The composer of AV. x. 1. 6, when he exclaims, '*Pratiçīna* ('Back-hurler'), the descendant of *Āṅgiras*, is our overseer and chaplain (*purohita*): do thou drive back again (*pratiçīḥ*) the spells, and slay yonder fashioners of spells,' has also in mind the divine *purohita*. The stanza foreshadows the later formation *pratyaṅgiras*, discussed above. We look in vain, however, for statements of the reason why the word *atharvan* should be especially associated with *çānta* and *bheṣaja*, and must assume for the present that this was accomplished by secondarily contrasting it with *āṅgiras*, after the sense of *ghora*, *ābhicārika* had incrustated itself over it.\* The uncertainty of all this does not endanger the result that at a comparatively early time the terms *atharvāṇaḥ* in the sense of 'holy charms,' and *āṅgirasāḥ* in the sense of 'witchcraft charms,' joined the more distinctively hieratic terms *ṛcaḥ*, *yajūñṣi*, and *sāmāni* as characteristic types of Brahmanical literary performances. But this distinction was at a later period again abandoned; in the end, the name *atharvan* and its derivatives prevail as designations of the charms and practices of the fourth Veda, without reference to their strongly diversified character.

6. The root *kar*, *skar*; by Professor E. W. Hopkins, Yale University, New Haven, Conn.

The supposititious root *skar* is accepted rather doubtfully by philologist and etymologist alike.† There is good reason for the suspicion with which this form of the root is regarded. From a comparative point of view, the root would be quite unique in showing *sk* in Sanskrit and in no other language. Other roots with assured initial *sk* all show the sibilant somewhere, as in the case of *skand*, *scando*, *scinnim*; *skabh*, *skoba*, *scabellum*; *skar* (Avestan), *σκαίρω*; *skū*, *σκούρος*, *scutum*,

\* A dash of popular etymology may have helped on the process: *a-tharvan* 'not injuring'; cf. the root *thurv* in the sense of 'injure' Dhātup. 15. 62, and perhaps MS. ii. 10. 1. Also the roots *tūrv* and *dhūrv* with similar meanings.

† Whitney, *Grammar*, § 1087 d; Fick, *Wörterbuch*, i 4., p. 24.

*obscurus, sky*.\* But *skar* has not even an Avestan parallel. To be sure, Fick attributes *skarana* in *garemō-skarana*† (Vd. 14. 7) to *kar*, herein following Justi; but Professor Jackson calls my attention to the fact that *skarana* is now identified with the Persian *sukar*, 'coal'—so by Horn, *Grundriss der neupersischen Etymologie*, p. 163; Geldner, KZ. xxv., p. 566.

On the other hand the rapid growth of *skar* at the expense of *kar* in the post-Vedic language naturally raises the question whether this encroachment cannot be traced to its beginning. Such forms as *saṁ-caskara*, *apaskara*, *upaskara*, *viskara* (*viškara* = *vikara*) are plainly an extension of the earlier use of *skar* (almost confined to cases where the root is combined with *pāri* or *sām*) and suggest of themselves that *s* is a parasitic growth.

We can summarize this spread of the sibilant very easily. Till the period of the Rig-Veda no *s* is found (Latin *creo*, *cerus*, *ludicrum*; Greek *κραινω*; Slavic *kruci*; Lithuanian *kurti*; Avestan *kar*, *hakeret* = *sakṛt*). In the Rig-Veda, there are but two cases of *skar* in books ii.-vii., and these are not in the oldest part of this group (iii. 28. 2; v. 76. 2).‡ In the ninth book is one repeated word which occurs always in the same application, seven times as passive participle (*pāriṣkṛta*), once as active participle, *pāriṣkṛvānn āniṣkṛtam*, 39. 2, and twice as a third plural with the same preposition (*pāriṣkṛvanti*), 14. 2; 64. 23.§ It is here a stereotyped phrase. In the tenth book there are four occurrences of the participle, and the application is varied, though the combination with *pāri* is preserved. Three of these four cases are quite certainly in late hymns or verses. In x. 32. 3 (a late verse), the *vahatús* is thus 'adorned'; in x. 85. 6, the *vāsas*; in x. 107. 10 (praise of *dákṣiṇa*), the *végma*; in x. 135. 7, *ayám* (Yama). The only case where the verb is used freely occurs in this tenth book, withal in the hymn to Night, where (after a preceding *nir*) is found *askṛta*, x. 127. 3.

The tenth book, excluding this last form, has the same number of cases as has the eighth. The latter has *pāriṣkṛta*, of *sóma*, 1. 26; and of *vípra* (Agni), 39. 9; *sám-skṛta*, of Indra, 33. 9; and *súsám-skṛta*, 66. 11 (a late verse). The last form occurs also i. 38. 12 (a Kāṇva hymn). There are thus twice as many cases in the tenth book as in ii.-vii.; and the Kāṇva collection has as many cases as has the tenth book.¶ The

\* The palatal of *çand*, *candeo*, is not in the same category and probably the sibilant is not original (see below). The lost *s* of *kṛdhú* (*áskṛdhoyu*) is kept by the Greek and Lithuanian parallels. Compare Fick, *loc. cit.*, p. 142.

† Fick, *l. c.*, p. 184. Compare the other compounds (without *s*) *zaranyókereta*, *hañkereta*; and see Geldner, KZ. xxv., p. 566; Horn, *Grundriss d. neupers. Etym.* §742.

‡ In the former case *pāriṣkṛta* is used (of the *puroḍāś*); in the latter, *sám-skṛta* (of *gharmá*).

§ The seven cases of the participle occur in ix. 43. 3; 61. 13; 86. 24; 99. 2; 105. 2; 113. 4 (all *pāriṣkṛta*); and 46. 2 (*pāriṣkṛtāsas*). The application in every case of participle and verb is to *sóma* (*indu*, *hári*, etc.).

¶ It is to show this point that the data are here collected. If viii. is late there is historical progression in the spread of the form.



Brahmanic and later literature add *abhisaṃskar*, *upasaṃskar*, *prati-saṃskar*, *paryaskarot* (Pāṇini), etc.

A perfect parallel to the gradual growth of *skar*, as opposed to *kar*, is supplied by *skir*, *upaskirati*, which comes to light after the Rig-Veda; and perhaps by *skart* (= *kart*?) in *saṃskṛtatrá*. The former root (*s*)*kir* like (*s*)*kar* shows no sign of an *s* in Slavic, Lithuanian, or Teutonic parallels;\* yet after the Rig-Veda, which also shows no *s*, the sibilant is found. The identity of *skart* and *kart* is doubtful.† Other parallels are to be found in some palatal roots. Parallel to the older *car* (*colo*, *κέλευθος*, *kelys*) of the Rig-Veda, stands *çar* in the later Māit. Saṃhitā (not noticed by Fick, s. v., i., p. 25). Even in RV. *çam*, i. 104. 2, the metre shows that the preceding vowel is short and *cam* or *çam* (κάμνω?) must be the form. In the case of *çand* (*candeo*, *kadrú*), despite *cāniçadat* and *çandrá*, strong evidence for the priority of the form *cand* is given by the fact that in the old compounds, *puruçcandrá* and *viçváçcandra*, the preceding syllables have to be read short in almost every case.

The cause‡ of the origin of *skar* may be more or less theoretical, but it is easy to see how the new form spread. The verb is compounded with especial frequency with *āvis*, *purás*, *mahás*, and also very commonly with *nis*(*iç*). An early case is *duskereta*, *duşkṛtá* in Avestan and Vedic; so later we may compare the frequent nominal combinations, *namaskāra*, etc. An example may be taken from (Sanskrit) *avaskara* = *avas kara*. The temporal relation between the two forms is illustrated by Vedic (Sūtra) *upakarana*, but Epic *upaskara* (*upaskāra*). It is noteworthy that, despite the regular RV. *saṃskar*, the form *sāṃkṛti* still holds its own in TS. and later (see P.W., s. v.).

The form *āskra*, referred to this root by the lexicographers, has nothing to do with it. In each of the three instances where the word occurs it means 'united' (i. 186. 2; iii. 6. 4; vii. 43. 5). Now *kar* + *ā* never has this meaning. In Avestan, the combination means simply 'make.' In the Rig-Veda (*ākṛte gṛhé*, viii. 10. 1, etc.), it has either this meaning or, commonly, that of 'bring hither.' We cite as a typical example, x. 156. 2, *yáyā gā ākārāmahe sēnayāgne*, etc. There are half-a-dozen examples of *ā kar* in x. used in the same way. In the family books, compare viii. 77. 4: *dāçúçe 'rvāñcam rayīm ā kṛdhi*. So too in x. 8. 9, where *gónām ācarāñās*, means only 'bringing to himself the cows'; while *ānākṛta*, i. 141. 7, is 'what one cannot bring to himself.' The meanings 'make,' 'form,' and 'bring hither' are still shown in Sanskrit *ākāra*, *ākāraṇa* (compare *ākṛti*, RV. x. 85. 5). As *kar* + *ā* never makes *āskar* in RV. and never means 'unite,' *āskra* 'united' cannot be from this root.

\* Fick, *loc cit.*, p. 25.

† Avestan *kareta*, Greek *κείρω*, Latin *curtus*, render the identity more than questionable. The meaning (RV. vi. 28. 4) is quite uncertain.

‡ It is discussed in Professor Hopkins's article above, page 69.—ED'S.

7. On Mahā-Bhārata iii. 142. 35-45, an echo of an old Hindu-Persian legend; by Professor A. V. Williams Jackson, Columbia University, New York City.

The subject of the Yama-Yima legend has always been a fruitful field of study in the department of Indo-Iranian research. Parallels and resemblances, as well as contrasts and differences, between the Hindu Yama and the Persian Yima, or Jamshid, have often enough been discussed. The figure of the Vedic Yama, that mortal, the first to go the way of death and to point out the path for departed souls to follow, or, again, of that potent sovereign of the south, the stern judge hereafter, as found in the later Sanskrit literature, is familiar to every student of Indian antiquity. Consult, for example, Hopkins *Religions of India* pp. 128-135, 150 (Yama bibliography); Kaegi *Rig-Veda* (translation by Arrowsmith) pp. 67-70; and Spiegel *Arische Periode* pp. 243-256.

In Iranian legend the most marked feature of Yima's personality is that of the kingly ruler in whose reign the Golden Age of the world prevailed. Under his princely sway, as is described in the Avesta (Vd. ii. 4-19), the earth flourished and brought forth in abundance, the flocks and herds multiplied, mankind increased; for it was from Ahura Mazda himself that Yima received the command to 'further and increase the world' (Vd. ii. 4 *āaṭ mē gaēthāo frādhaya, āaṭ mē gaēthāo varedhaya*). The Vendidad further portrays the scene (cf. Geldner *K. Z.* xxv. 182):

'Then the earth became abounding,  
Full of flocks and herds of cattle,  
Full of men, of birds, dogs likewise,  
Full of fires all bright and blazing.  
Nor did men, flocks, herds of cattle,  
Longer find them places on it.'

So overcrowded had the earth thus become! This excessive plenitude was due to the sovereignty of Yima, for neither sickness nor misery, disease nor death, existed as long as princely Yima ruled (Ys. ix. 4-5; Yt. v. 25-26, xv. 15, xvii. 28, xix. 31). Firdausi's picture of royal Jamshid's reign, as drawn in the Shāh-Nāmāh, is worth placing beside this particular description in the present connection (cf. *Schahname*, ed. Vullers, i. p. 23 seq.; cf. Mohl *Le Livre des Rois*, i. p. 33-36 and especially p. 37, 'ainsi s'étaient passés trois cents ans, pendant lesquels la mort était inconnue parmi les hommes. Ils ne connaissaient ni la peine, ni le malheur, etc.' One of the Iranian characteristics, therefore, of Yima's reign was this plenitude of life and increase on earth.

In Indian literature, so far as I recall, special attention seems not to have been drawn to the increase of mankind and the over-population of the earth under Yama's beneficent sway. For this reason I call up to notice a passage in the Mahā-Bhārata that seems to show an Indian likeness to the Iranian idea. This will be but a point to add to others, in which, as has been shown for example by Darmesteter, Persia may serve to throw a side light upon the Mahā-Bhārata.

The passage in the Mahā-Bhārata (iii. 142. 35 ff = 10933 ff), to which I should like to direct attention, narrates the unprecedented deed of Vishnu, who, in his incarnation as a Boar, rescued the earth that had sunk into the nether regions in consequence of over-population. But how did this over-population come to pass? The text here rendered has the answer :

'In times gone by, the Krita Age, fearful, prevailed upon the earth,  
And (Vishnu,) Primal God Eterne, acted the part that Yama played ;  
And when the all-wise God of gods acted the part that Yama played,  
No creature any longer died, but only births occurred on earth.  
Accordingly the birds began to multiply, and beasts, and kine,  
The cows and horses, and the deer, and all carnivorous animals ;  
Likewise the human race began increasing, and to multiply  
By thousands and by myriads, just as a stream of water grows.  
Now, when on earth had come to pass this overcrowding terrible,  
The earth o'erburdened by the weight sank down a hundred leagues in depth,  
Suffering dire pain in all her limbs, and by the pressing weight distraught ;  
The earth distracted then sought help of Vishnu, best of all the gods.'

Thereupon, as the story goes on to narrate, the divine Vishnu gives ear to the appeal uttered by suppliant earth ; he becomes incarnate in the form of a Boar, and upon his shining tusk, as is recorded also elsewhere in Hindu mythology, he raises the trembling and afflicted earth out of the depths and saves her from disaster.

The point of resemblance to the Iranian legend, so far as relates to the increase of life under Yima, is patent. As soon as the God Supreme in the Mahā-Bhārata begins to play the rôle of Yama (*yamatvam kṛ*), death ceases, 'while the births are as usual' (thus *jāyate vā* is rendered in Roy's version—*vā = eva*) ; the flocks, the herds, the fowls of the air, and the whole race of man increase and multiply in numbers in the Mahā-Bhārata, precisely as the *pasu*, *staora*, *maśyāka*, *svan*, *vāi* are augmented in the Avesta ; the earth becomes overburdened in the Mahā-Bhārata, exactly as the crowded throng in Yima's day no longer find for themselves places on the earth in the Avesta (*noīḥ him gātvō viñden*). The means of relieving the difficulty, however, differ of course in the Mahā-Bhārata and in the Avesta, as the attendant circumstances themselves are somewhat different ; but that the characteristic feature of the *yamatva* is plenitude, increase, augmentation, is evident enough.

A somewhat kindred idea of the nature of Yama's realm is preserved in his *sabhā* described in Mbh. ii. 8. 2-4, which bears a certain likeness to the Avestan *vara* of Yima, since 'neither cold nor heat, grief nor old age, hunger nor thirst' exist in it. Cf. Hopkins *Proceedings A. O. S. May* 1891, p. xciv, and April 1892, p. clxxix, on *ūrvā* ; see also Lanman *Sanskrit Reader* p. 378. Fairly certain, however, it seems that the word *yamatva* above discussed, with all its association of increase and plenitude, receives new light when brought into connection with the Avesta, and the passage is of value because it preserves a reminiscence

of Yama's character, which, though familiar in Persia, seems otherwise to have been lost in Sanskrit literature, and thus the *Mahā-Bhārata* with its *yamatvam kṛ* etc. keeps for us an echo of an old Hindu-Persian legend, a bit of antique lore from the days of Indo-Iranian community.

8. On the iterative optative in Avestan ; by Professor Jackson.

In a limited number of instances in the Avesta the optative mode is used iteratively to express a customary, repeated, wonted, or general action. Its employment is like that of the subjunctive of typical action which occurs quite commonly in Avestan. This iterative use of the optative is doubtless a development out of the potential force inherent in the mode ; the optative, thus employed, assumes a significance almost like a present or a preterite. To English ears, a usage precisely parallel to this modal phase is familiar in such a periphrastic form as 'she would sit the livelong day and weep.'

The instances in the Avesta which I have been able thus far to collect are here presented. Some of them have already been noted by Bartholomae *Das altiranische Verbum*, p. 212. Other additions to the list may later be made. It will be observed that I have not been able as yet to quote for the list a positive occurrence of an iterative optative in the metrical Gāthās. Most of the examples cited are from later texts, but it will be noticed that half the instances are from metrical portions of the Avesta. It will likewise be observed in several of the occurrences that the optative stands in a relative or subordinate clause. The number of these latter might have been increased. Two of the instances of the iterative optative occur in sentences which denote a comparison. The material follows :

1. Av. (Gāthic prose) *athā athā cōiṭ ahurō mazdāo zarathuštreṃ adakhšayaēta—athā athā cōiṭ daēvāiš sarem vyāmrvīta—athā azemciṭ daēvāiš sarem vimruye* 'just as Ahura Mazda taught Zarathushtra and as Zarathushtra renounced connection with the Demons, so do I renounce connection with the Demons' (i. e. 'as Ormazd was wont to teach, etc.' *vdakhš*, cf. Ys. xliii. 15). Ys. xii. 5. But note that Caland, KZ. xxxiii. 302, takes *vyāmrvīta* as preterite indicative.

2. Av. (prose) *zarathuštrō ahunem vairīm frasrāvayaṭ* (v. l. optative *frasravayōiṭ*)—*āpō vañuhīš frāyazaēta—daēndm māzdayasnīm fra-orenaēta* 'Zarathushtra repeatedly chanted the Ahuna Vairya formula and worshipped the good waters and professed the law of the worshippers of Mazda.' Vd. xix. 2.

3. Av. *yō anu aēšām baresma frastareñti yatha ašava jamāspa frastarenaēta ratufriš* 'whoso forms the bundle of barsom as the righteous Jamaspa was wont to form it (or would form it, if living), such a one is satisfactory to the priest' (Nirangistan 88, cf. Darmesteter *Le Zend-Avesta* iii. 136 ; also ed. by Darab Dastur Peshotan Sanjana p. . . .).

4. Av. (metrical) *mithrem vouru-gaoyaoitīm yō bādha ustāna-zastō | urvazemnō avaroit̄ vācim* 'Mithra, the lord of wide pastures, who constantly raises (opt.) his voice joyously and with uplifted hands.' Yt. x. 73.

5. Av. (metrical) *karsnahe—fravašīm yazamaide—yeñhe nmāne ašiš vañuhi | srīra khšoithni fracaraēta* 'we worship the Fravashi of Karsna in whose house tarried (i. e. was wont to abide) Ashi Vanuhi. Yt. xiii. 107. So also Caland.

6. Av. (metrical) *tūm zemargūzō akerenavō | vispe daēva zarathuštra | yōi para ahmāt̄ vīrōraodha | apatayen paiti āya zemā* 'thou, O Zarathushtra, didst banish under the earth all the Demons that formerly in human shape were wont to fly upon this earth.' Ys. ix. 15.

7-10. Likewise in these general relative clauses: YAv. (metrical) *reñjaiti haomahe madhō | yō yatha puthrem taurunem | haomem vañ-daēta mašyō* | 'the intoxication of Haoma makes lively the man who greets (whosoever is wont to greet—opt.) Haoma like a young son.' Ys. x. 8;—Av. *yaŋ tūm ainīm avaēnōiš saocayaca kerenavañtem—āaŋ tūm nišidhōiš gāthāo-srāvayō—frataire gātvō āonhanam fratarō-taire gātvō nišādhayōiš* 'as often as thou didst see another causing annoyance, then thou wouldst sit chanting the Psalms, and thou didst make me (thereby) to sit in a foremost place, who was already sitting in a forward place.' Hādhokht Nask ii. 13-14 (Yt. xxii. 13-14). Cf. Haug and West *Arda Viraf* p. 312.

9. "Universal" qualities in the Malayan language; by Dr. C. P. G. Scott, Radnor, Pa.

This paper set forth some of the characteristic phonetic, lexical, and syntactic features of the Malayan tongue, the general language of the Eastern Archipelago; pointed out their remarkable fundamental likeness in these respects to Latin and English; and sought to find the bases for the approximately "universal" use to which each of the three languages has attained within its historical and commercial sphere, in certain fundamental characteristics which concern universal grammar and logic, and in anthropology. There was also a skit at "Volapük" and "Spelin."